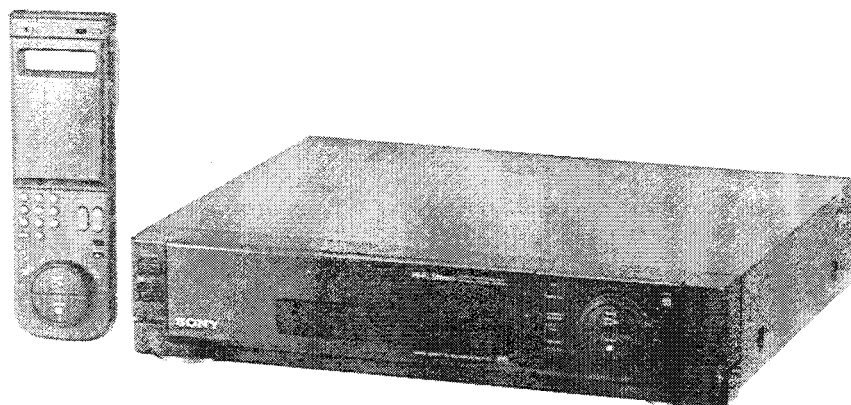


SLV-E7AE/AP/B/NC/NP/UB/VP SLV-ER7UY/SLV-E8UV RMT-AG1/V131/V131B

SERVICE MANUAL



- Refer to the SERVICE MANUAL of VHS MECHANICAL ADJUSTMENT II for MECHANICAL ADJUSTMENTS.
(9-972-816-11)

AEP Model
SLV-E7AE

Netherlands Model
SLV-E7AP

French Model
SLV-E7B

North European Model
SLV-E7NC

Spanish Model
SLV-E7NP

Germany Model
SLV-E7VP

UK Model
SLV-E7UB/ER7UY/E8UV



SPECIFICATIONS

System

Channel coverage

(E7: AE, AP, NP, VP)
PAL B/G:
VHF channels E2 to E12
CATV channels S01 to S03
S1 to S20
HYPER channels 2 to S41
UHF channels E21 to E69
(ER7UY/E7: B, NC, UB/E8UV)
PAL (1):
UHF channels 21 to 69

RF output signal

UHF channels 30 to 39

Aerial out

75 ohm asymmetrical aerial socket

Inputs and outputs

VIDEO IN

AUDIO IN

EURO-AV

AUDIO OUT

Phono jack (1)

Inputs signal: 1 Vp-p, 75 ohms,
unbalanced, sync negative

Phono jack (1)

Input level: - 7.5 dBs
(0 dBs = 0.775 Vrms)

Input impedance: more than 47 kilohms

21 pin

Video input: pin 20

Audio input: pins 2 and 6

Video output: pin 19

Audio output: pins 1 and 3

Phono jack (1)

Rated output level: - 7.5 dBs at load

Impedance: 47 kilohms

Output impedance: less than 10 kilohms

— Continued on next page —



VIDEO CASSETTE RECORDER
SONY®

General

Power requirements	(E7: AE, AP, NP, VP) 220 – 240 V AC, 50 Hz (ER7UY/E7: B, NC, UB/E8UV) 240 V AC, 50 Hz
Power consumption	25 W
Operating temperature range	5 °C to 40 °C (41 °F to 104 °F)
Storage temperature range	– 20 °C to 60 °C (– 4 °F to 140 °F)
Dimensions	430 × 90 × 372 mm (w/h/d) (17 × 3 ⁵ / ₁₆ × 14 ³ / ₁₆ inches) including projecting parts and controls
Weight	5.2 kg (11 lb 7 oz)

Accessories supplied

Remote Commander (1)
R6 (size AA) batteries
(SLV-E7UB: 2, SLV-E8UV: 4)
Aerial lead (1)
Audio cable (1)
AC mains lead (1)
RF screwdriver (1)
Video Plus+ Remote Commander
(SLV-E8UV only) (1)
Quick Start Manual (1)

Note

Design and specifications are subject to change without notice.

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
1.	SERVICE NOTE	4	5.	EXPLODED VIEWS	
2.	DISASSEMBLY		5-1.	Front Panel and Cabinet Assemblies	108
2-1.	Front Panel and Cabinet Assemblies	6	5-2.	Main Board and Power Block Assemblies	109
2-2.	MF-171, MF-172, MF-173 Board	6	5-3.	FL Cassette Compartment Assembly	110
2-3.	RP-163 Board and Mechanism Deck Block Assembly	7	5-4.	Mechanism Chassis Assembly (1)	111
2-4.	Power Block	7	5-5.	Mechanism Chassis Assembly (2)	112
2-5.	TU-136 Board	7	5-6.	Mechanism Chassis Assembly (3)	113
2-6.	GR-10, MA-144 Board	8	6.	ELECTRICAL PARTS LIST	114
2-7.	Internal Views	9	7.	ELECTRICAL ADJUSTMENTS	
3.	DIAGRAMS		7-1.	Pre-Adjustment Preparations	134
3-1.	Circuit Boards Location	10	7-1-1.	Instruments to be Used	134
3-2.	Overall Block Diagram	11	7-1-2.	Connection	134
3-3.	Video Block Diagram	15	7-1-3.	Set-up Adjustment	135
3-4.	System Control – Video Block Interface	19	7-1-4.	Alignment Tape (MH-2)	135
3-5.	System Control – Servo Peripheral Circuit Interface	21	7-1-5.	Specified I/O Level and Impedance Input / output terminal	135
3-6.	System Control – Mechanism Block Interface	23	7-1-6.	Adjusting Sequence	135
3-7.	System Control – System Control Peripheral Circuit Interface	25	7-2.	Power Supply Check (Power Block)	135
3-8.	System Control – Audio Block Interface	25	7-3.	System Control Check	136
3-9.	System Control – Tuner Block Interface	26	7-3-1.	Clock Adjustment (MF-172 Board)	136
3-10.	System Control and RF Modulator – Input Selection Block Interface	26	7-4.	Servo System Adjustment	136
3-11.	Servo System Control – Microprocessor Pin Function (MA-144 Board IC203)	27	7-4-1.	Switching Position Adjustment (MA-144 Board)	136
3-12.	Servo, System Control Block Diagram	29	7-5.	Audio System Adjustments	136
3-13.	Audio Block Diagram	32	7-5-1.	Hi-Fi Audio System Adjustment	136
3-14.	Timer, Tuner Mode Control Microcomputer Pin Function (MF-172 Board IC101 MB89905116)	35	7-5-2.	Normal Audio System Adjustment	138
3-15.	Timer, Tuner Mode Control Block Diagram	39	7-6.	Tuner System Adjustment	139
3-16.	Tuner Block Diagram	41	7-6-1.	RF AGC Check	139
3-17.	Power Block Diagram	44	7-6-2.	Receive Separation Adjustment (TU-136 Board)	139
4.	PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS		7-7.	Parts Arrangement Diagram for Adjustments	140
4-1.	Frame Schematic Diagram	47			
4-2.	Printed Wiring Boards and Schematic Diagrams	51			
	RP-163, GR-10 Boards	52			
	MA-144 Board	60			
	MA-144, CP-61, PD-37, VP-32 Boards	70			
	MD-56, CA-41, CM-14 Boards	78			
	HF-27 Board	83			
	PJ-57 Board	85			
	MF-171, MF-172, MF-173 Boards	89			
	TU-136 Board	99			
	Power Block	103			
4-3.	Semiconductors	107			

SECTION 1

SERVICE NOTE

1. RETURNING PINCH ROLLER, GUIDE ROLLER AND ELEVATOR CAM TO STOP CONDITION

- 1) Remove the bottom panel.
- 2) Turn the worm gear **A** of the cam motor, located at lower of the MD, to the arrow direction **B** by finger.

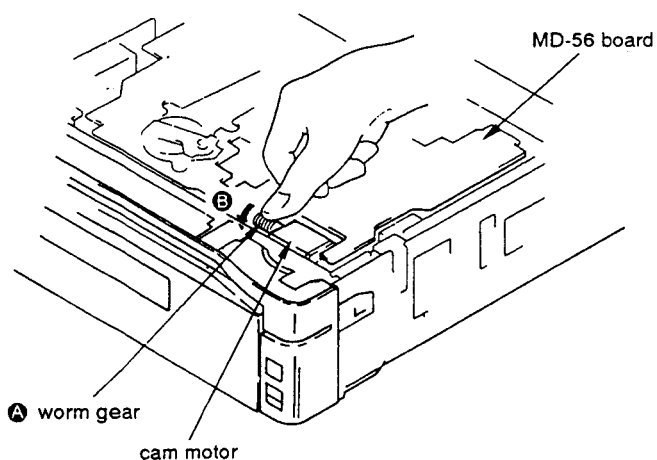


Fig. 1.

2. WINDING TAPE TO CASSETTE HALF

Turn the fly wheel **A** of the capstan motor to the arrow direction **B** by finger, then the cassette tape will be wound to the cassette half.

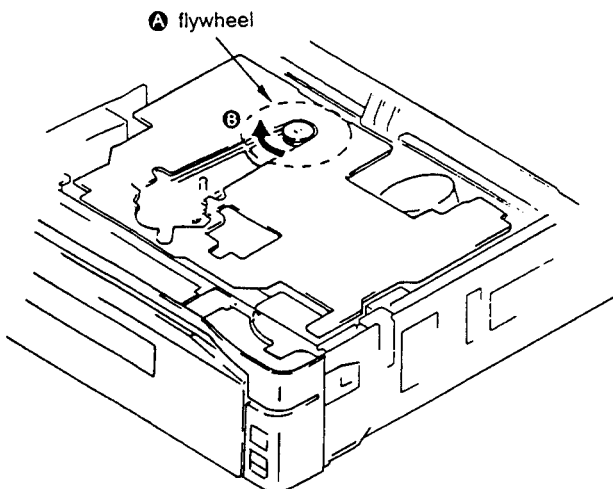


Fig. 2.

3. TAKING OUT CASSETTE WHEN UNIT IS DEFECTIVE WITH CASSETTE IN

- 1) Remove the upper case.
- 2) Turn the worm gear **A** of the FL cassette compartment motor to the arrow direction **B** by finger.

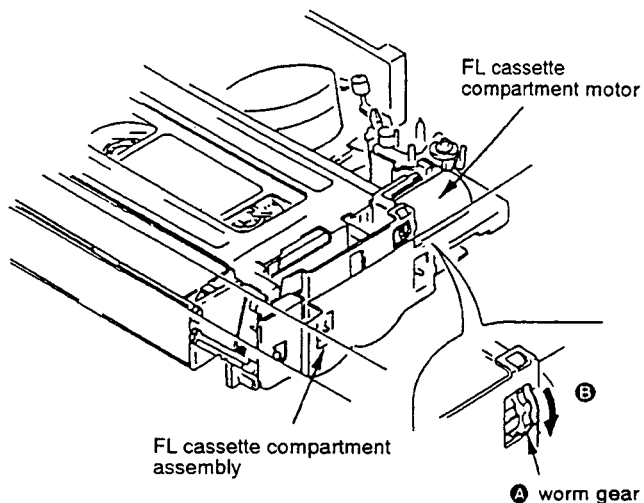


Fig. 3.

Note: When performing 1. to 3., be careful not to clog and damage the cassette tape.

4. UPPER DRUM REPLACEMENT

4-1. Removal of Upper Drum

- 1) Remove the screw ① (+P3 × 6) and take out the grounding shaft ②. (See Fig. 4.)
- 2) Remove the two screws ③ (+BVTP3 × 10) and take out the RP-163 board ④. (See Fig. 4.)
- 3) Completely remove the rotary upper drum board and desolder the soldering indicated by the arrows (12 points).
- 4) Remove two screws ⑤ (PSW3 × 8) and take out the rotary upper drum in the arrow direction A. (See Fig. 5.)
If it is difficult, remove by shaking the rotary upper drum gradually.

Note: If the drum can not be removed, check whether the solders have been removed or not again.

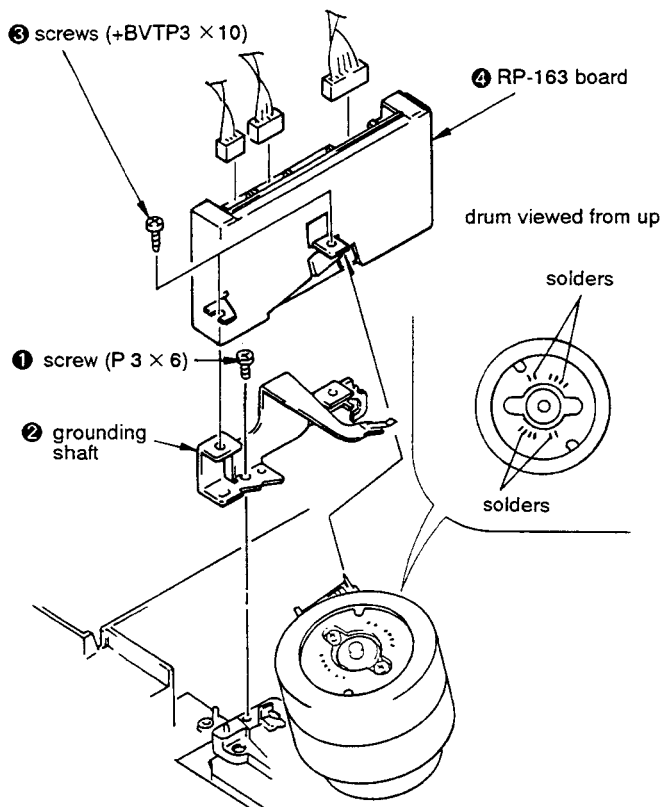


Fig. 4.

4-2. Mounting Upper Drum

- 1) When inserting the rotary drum into the lower drum, be careful not to blur the contacting surface with fingerprint or the like.
- 2) Mount the rotary upper drum board by aligning marked ➡ with marked ➡ of rotary transformer board (lower drum) so that the screw holes of both upper and lower drums match. (See Fig. 5.)
- 3) If it is difficult, mount the upper drum by shaking it gradually.

Note: Be careful not to damage the head. Make sure that the upper drum is tightly inserted.

- 4) Tighten two screws ⑤ (PSW3 × 8). (See Fig. 5.)

Note: Temporary tighten two screws. After making sure that upper drum is tightly inserted, tighten the screws.

- 5) Solder 12 points on the board of the rotary upper drum.
- 6) Fix the grounding shaft ② using the screw ① (+P3 × 6) so that the protrusion of grounding shaft end contacts the center of the drum shaft.

Note: When attaching the grounding shaft ②, be careful not to apply force to the spring section of it.

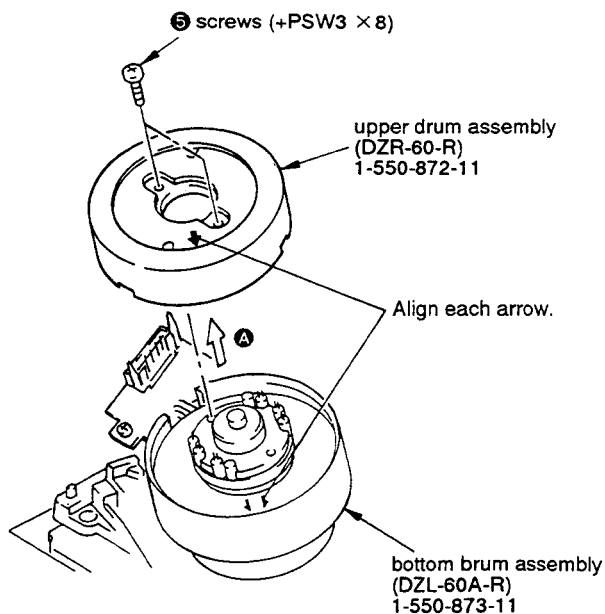
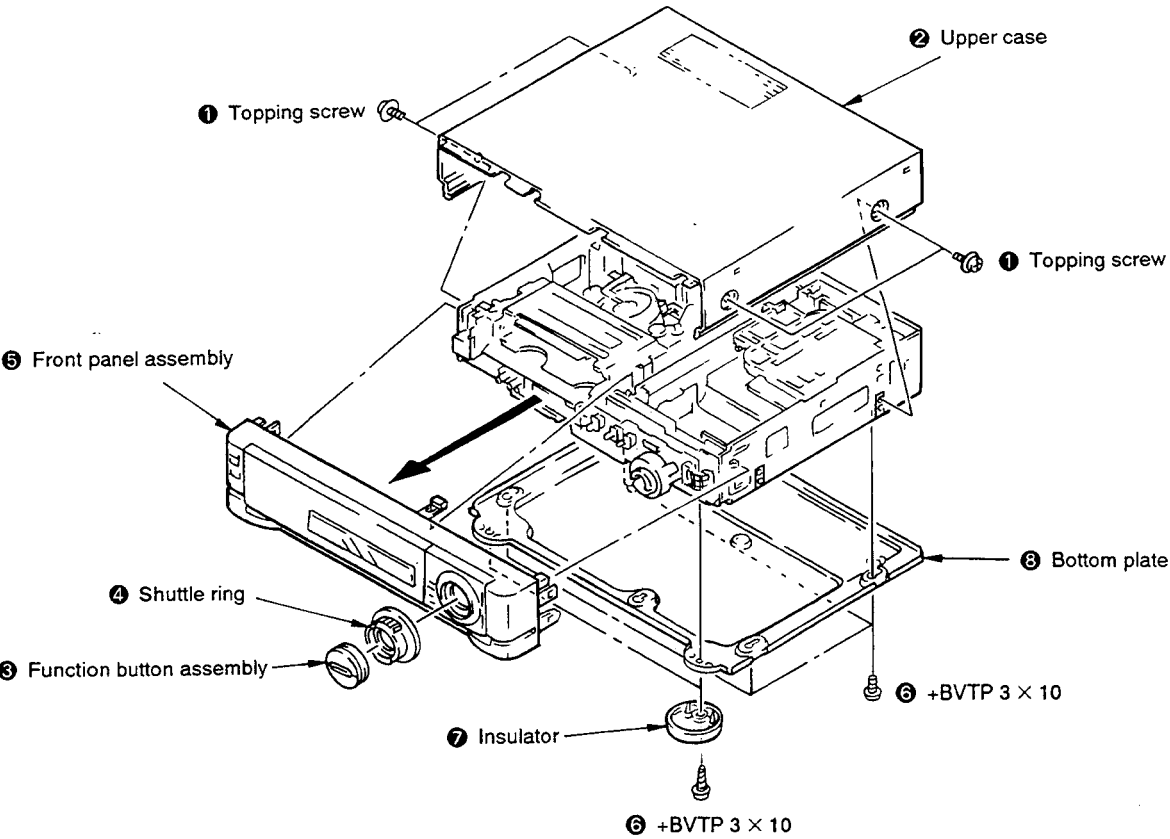


Fig. 5.

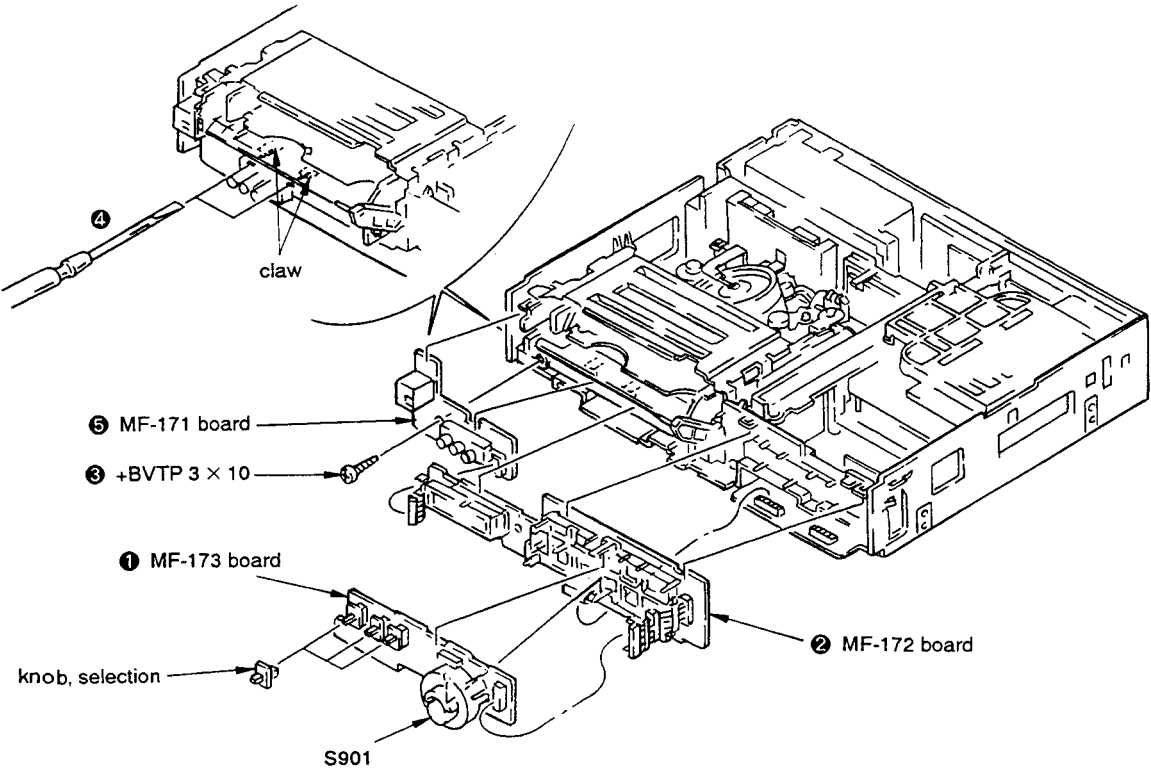
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

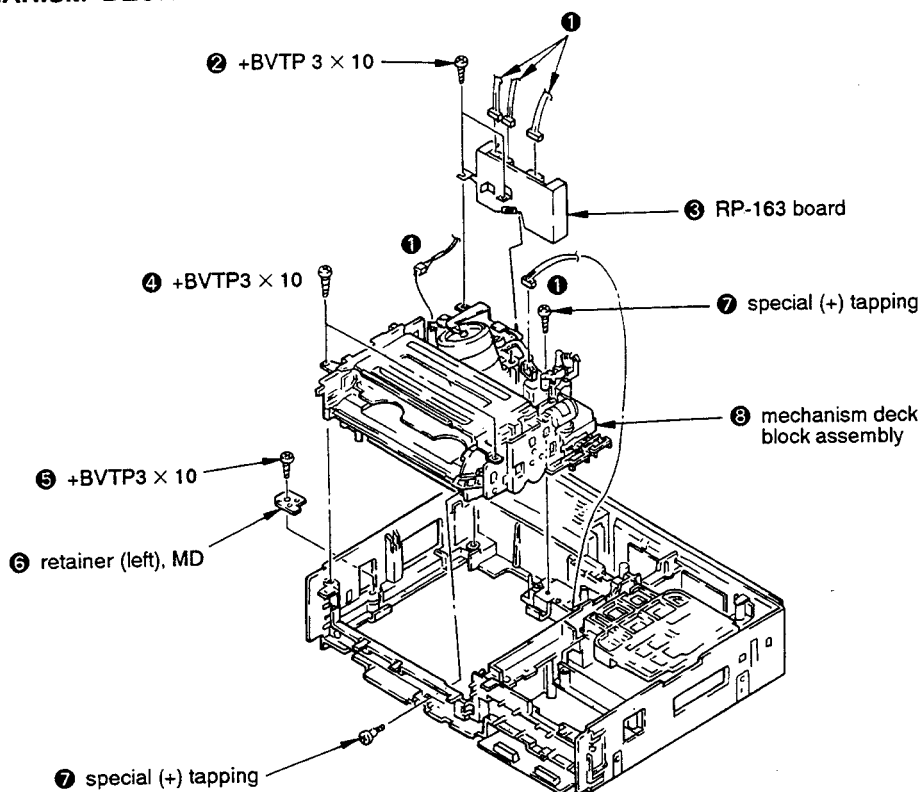
2-1. FRONT PANEL AND CABINET ASSEMBLIES



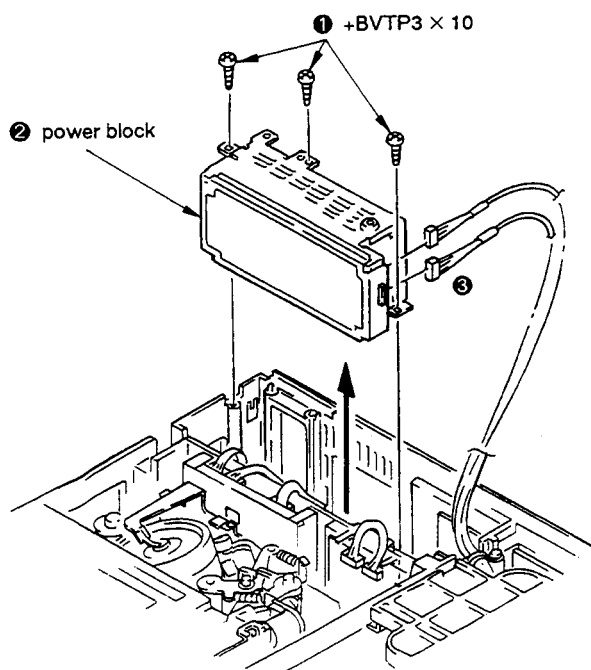
2-2. MF-171, MF-172, MF-173 BOARD



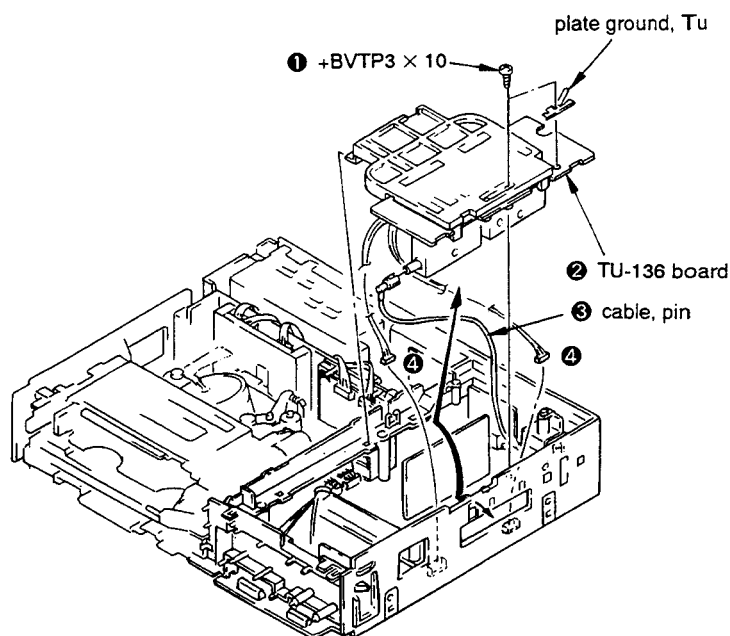
2-3. RP-163 BOARD AND MECHANISM DECK BLOCK ASSEMBLY



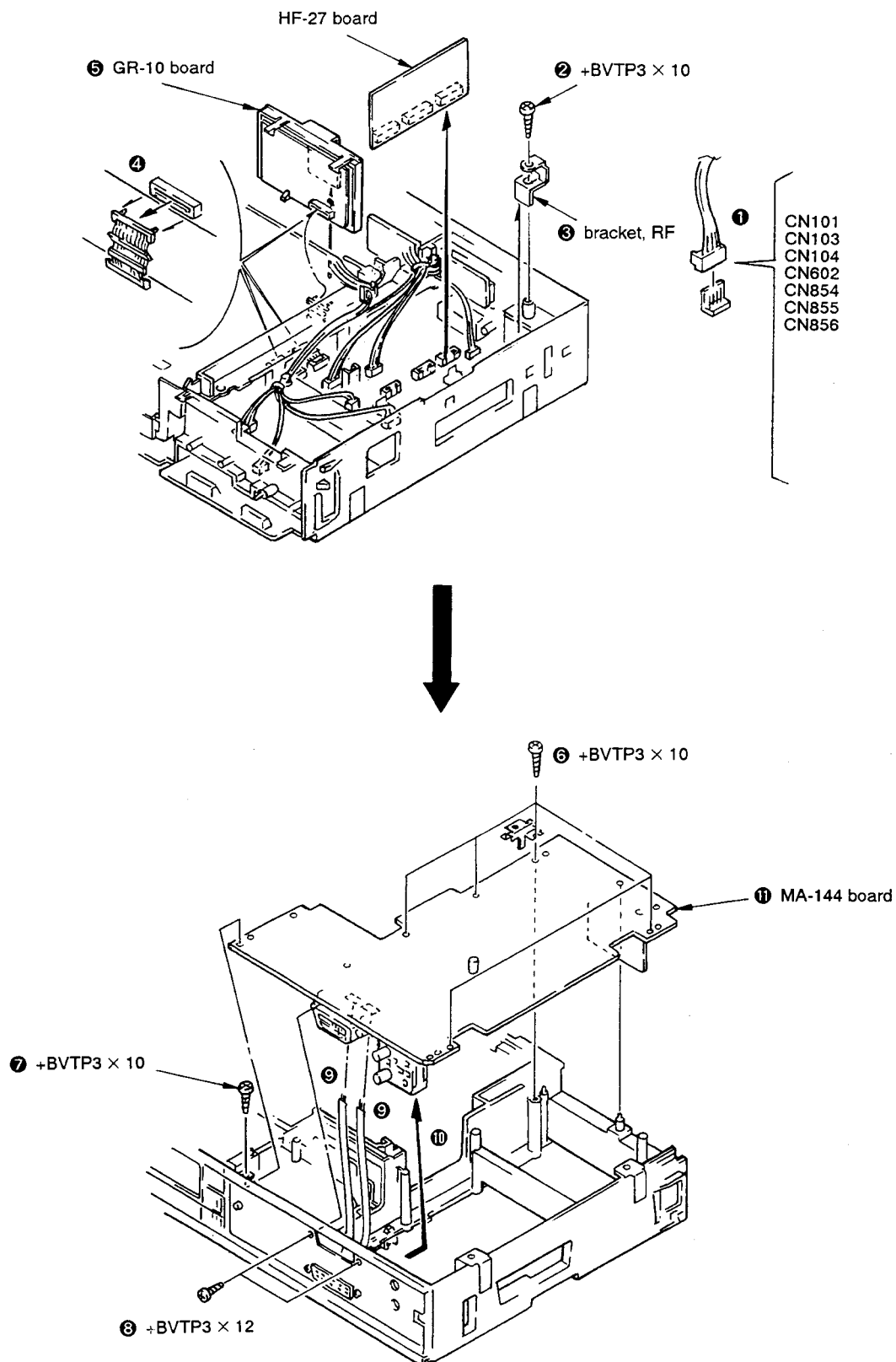
2-4. POWER BLOCK



2-5. TU-136 BOARD

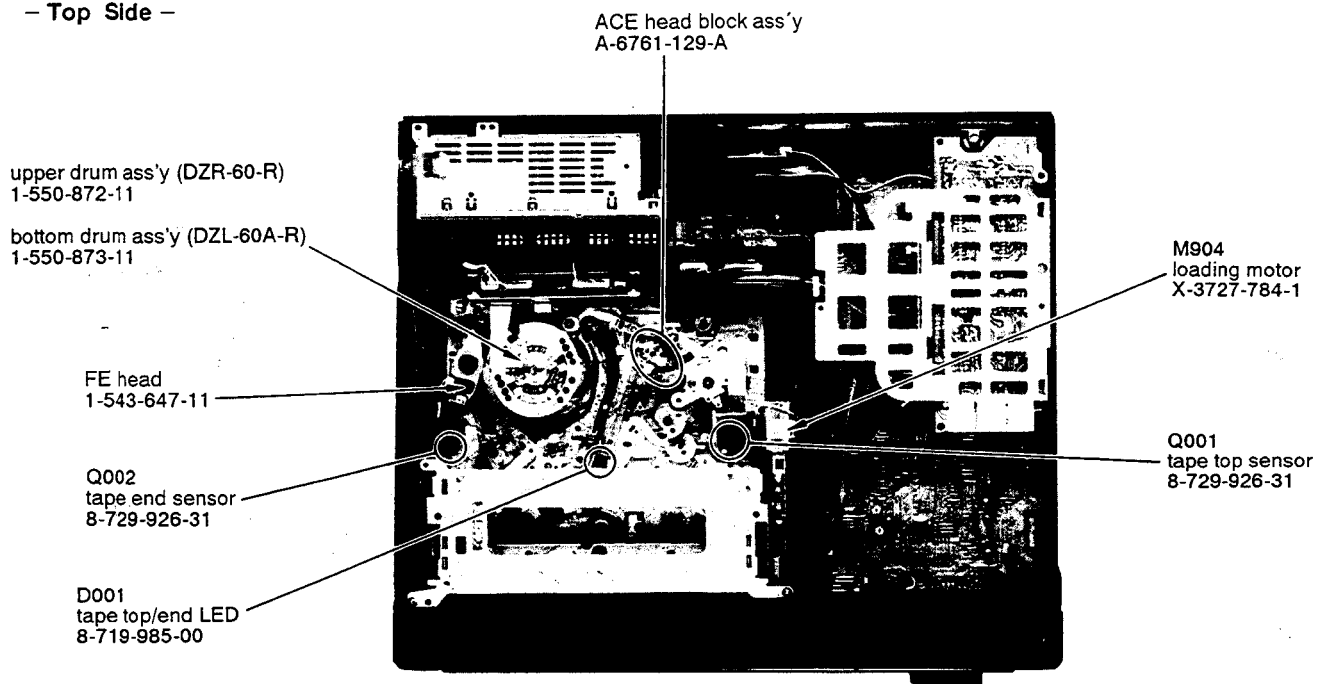


2-6. GR-10, MA-144 BOARD

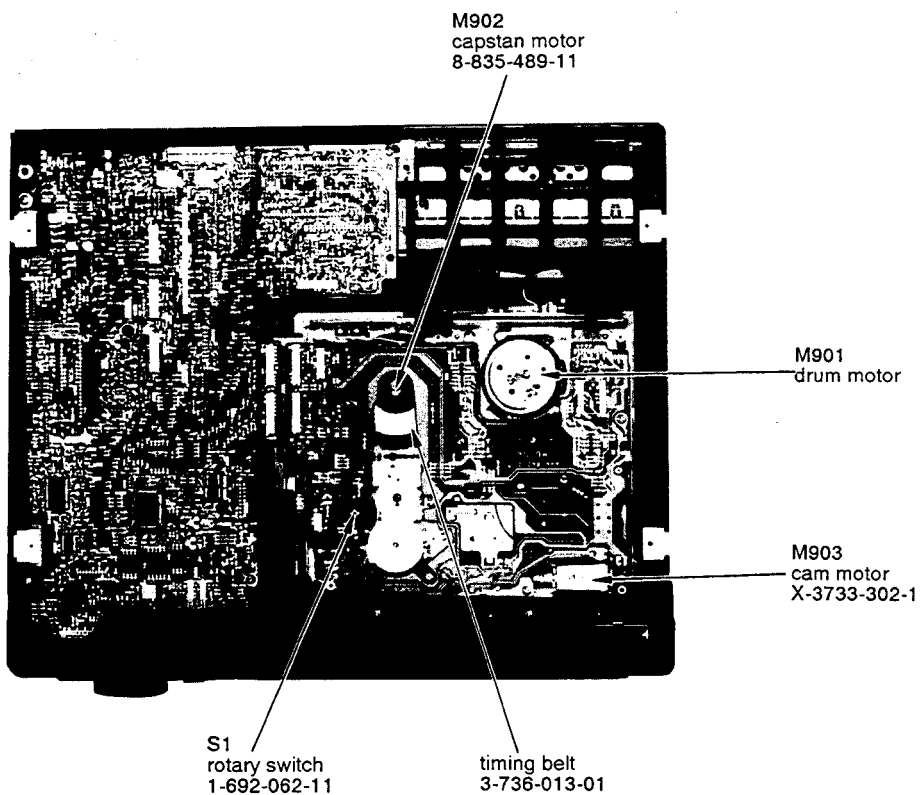


2-7. INTERNAL VIEWS

— Top Side —

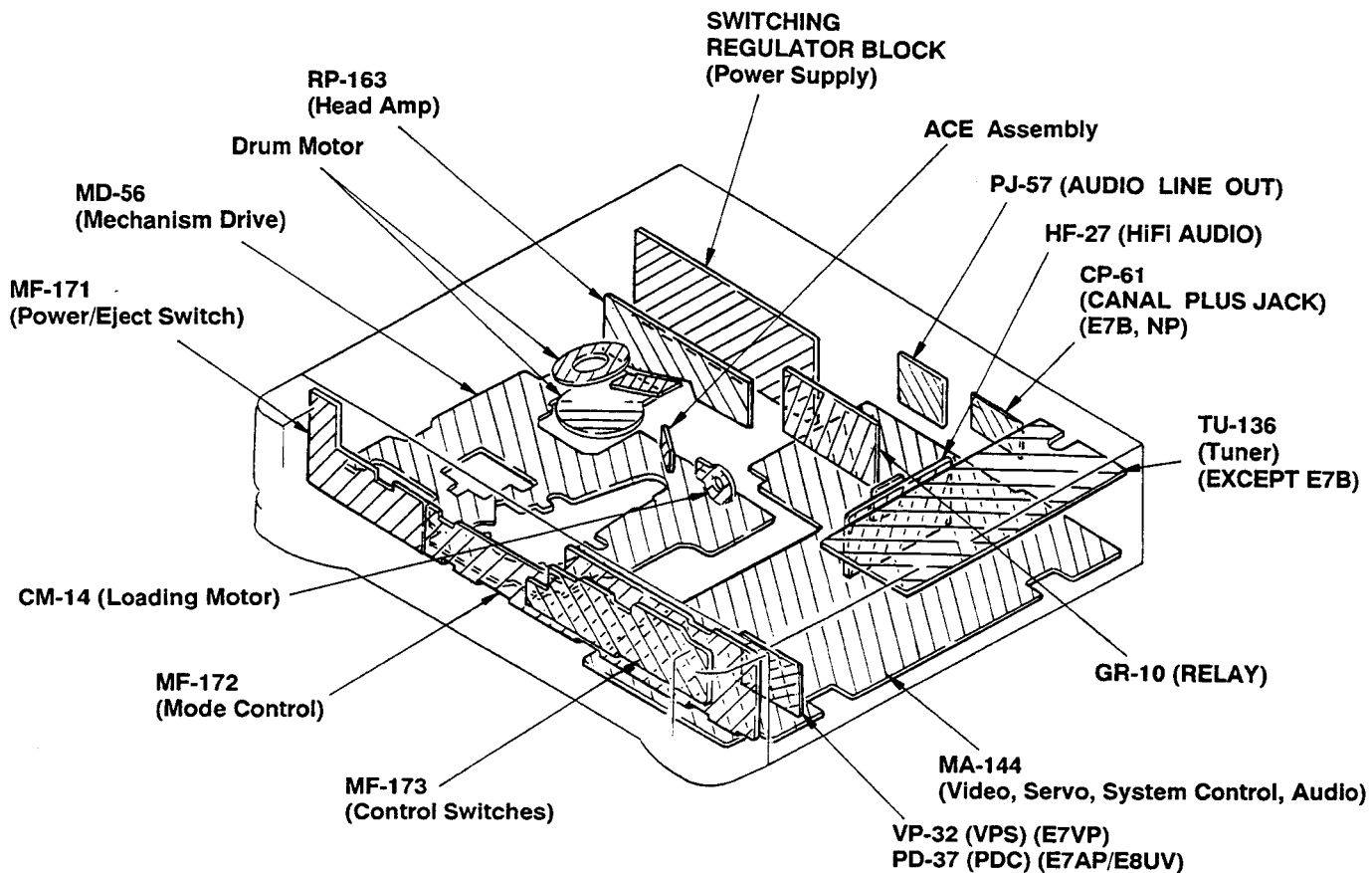


— Bottom Side —



SECTION 3 DIAGRAMS

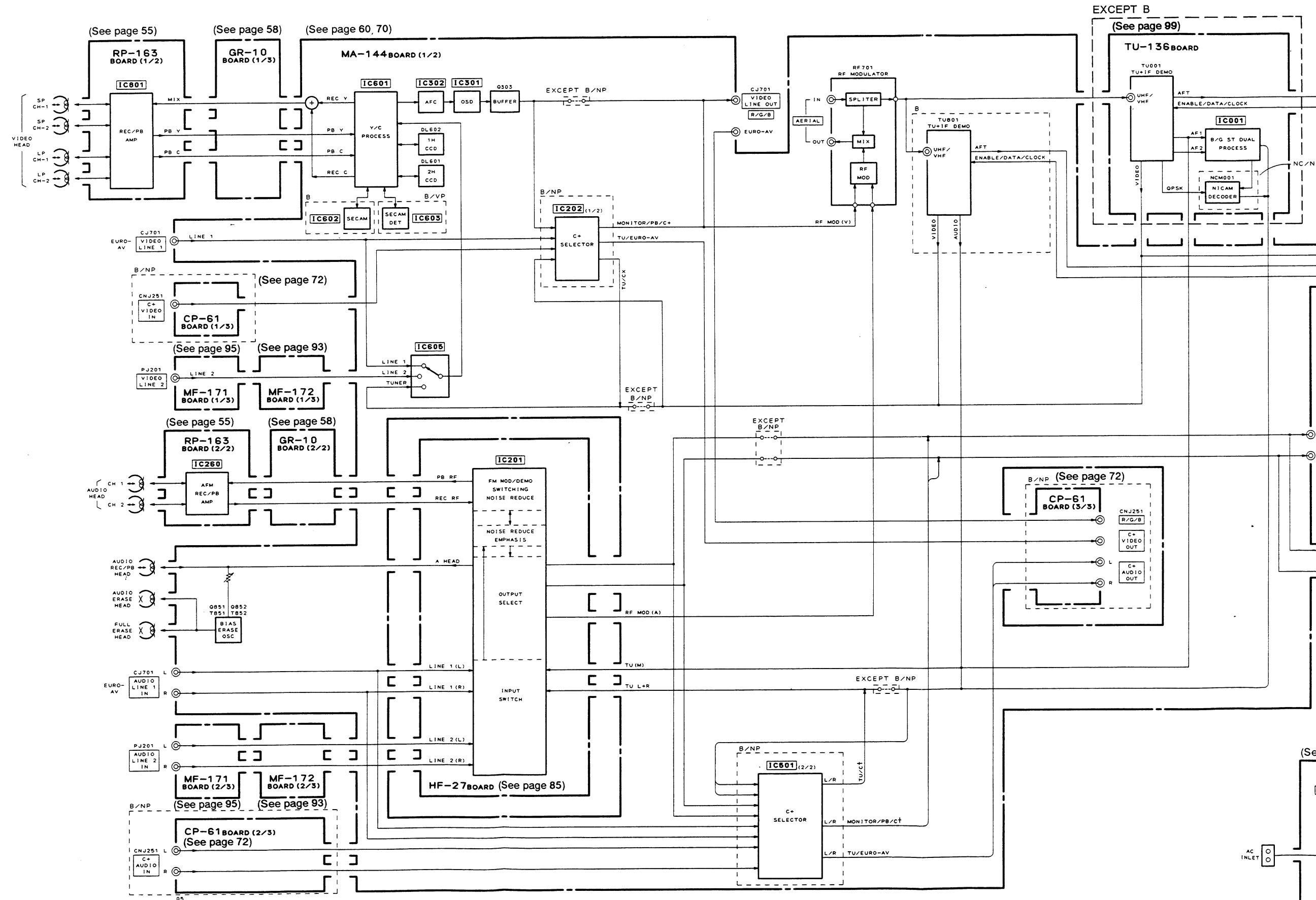
3-1. CIRCUIT BOARDS LOCATION



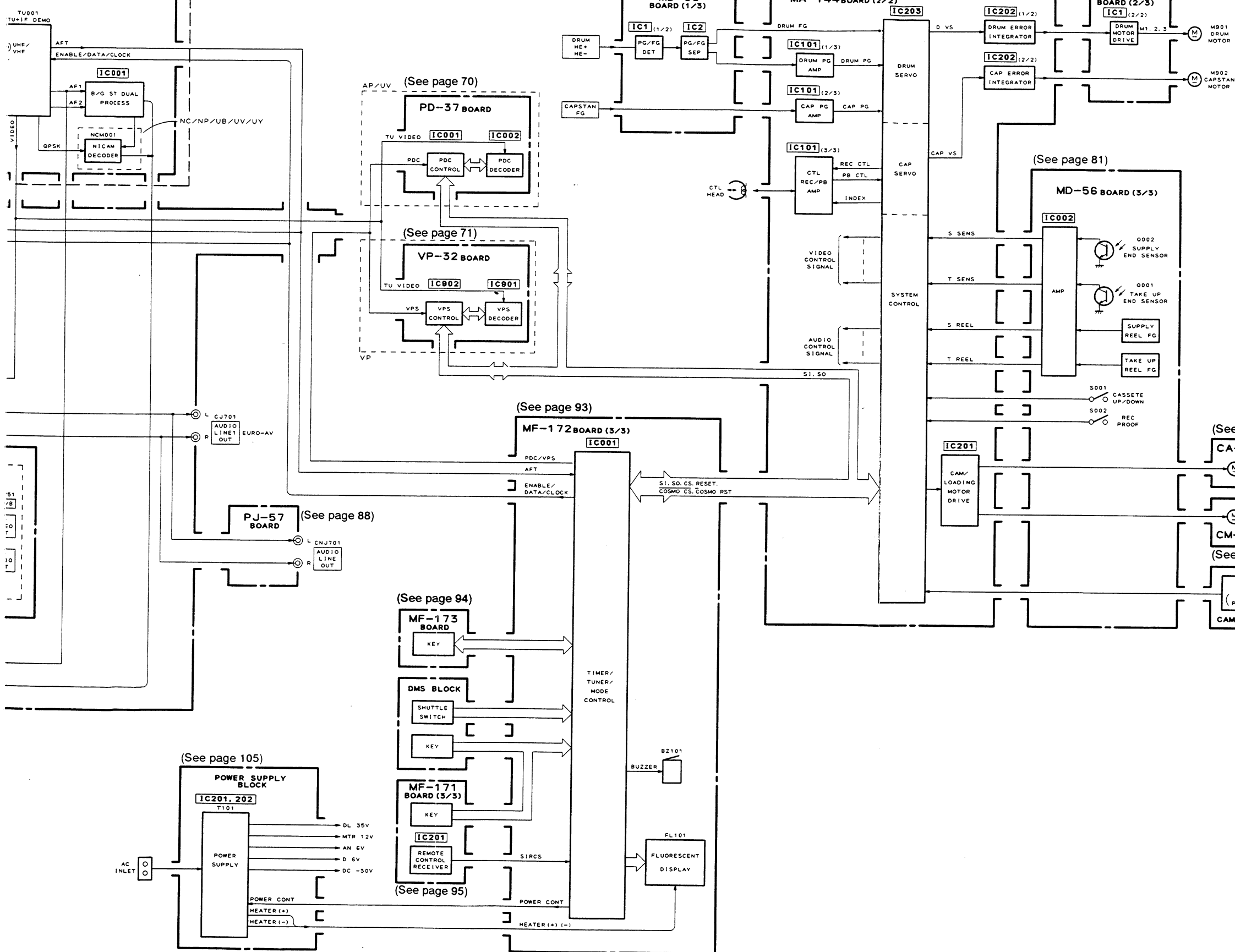
3-2. OVERALL BLOCK DIAGRAM

• In the diagrams, the model names are abbreviated as follows.

SLV-E7AE : AE
SLV-E7AP : AP
SLV-E7B : B
SLV-E7NC : NC
SLV-E7NP : NP
SLV-E7UB : UB
SLV-E8UV : UV
SLV-ER7UY : UY
SLV-E7VP : VP

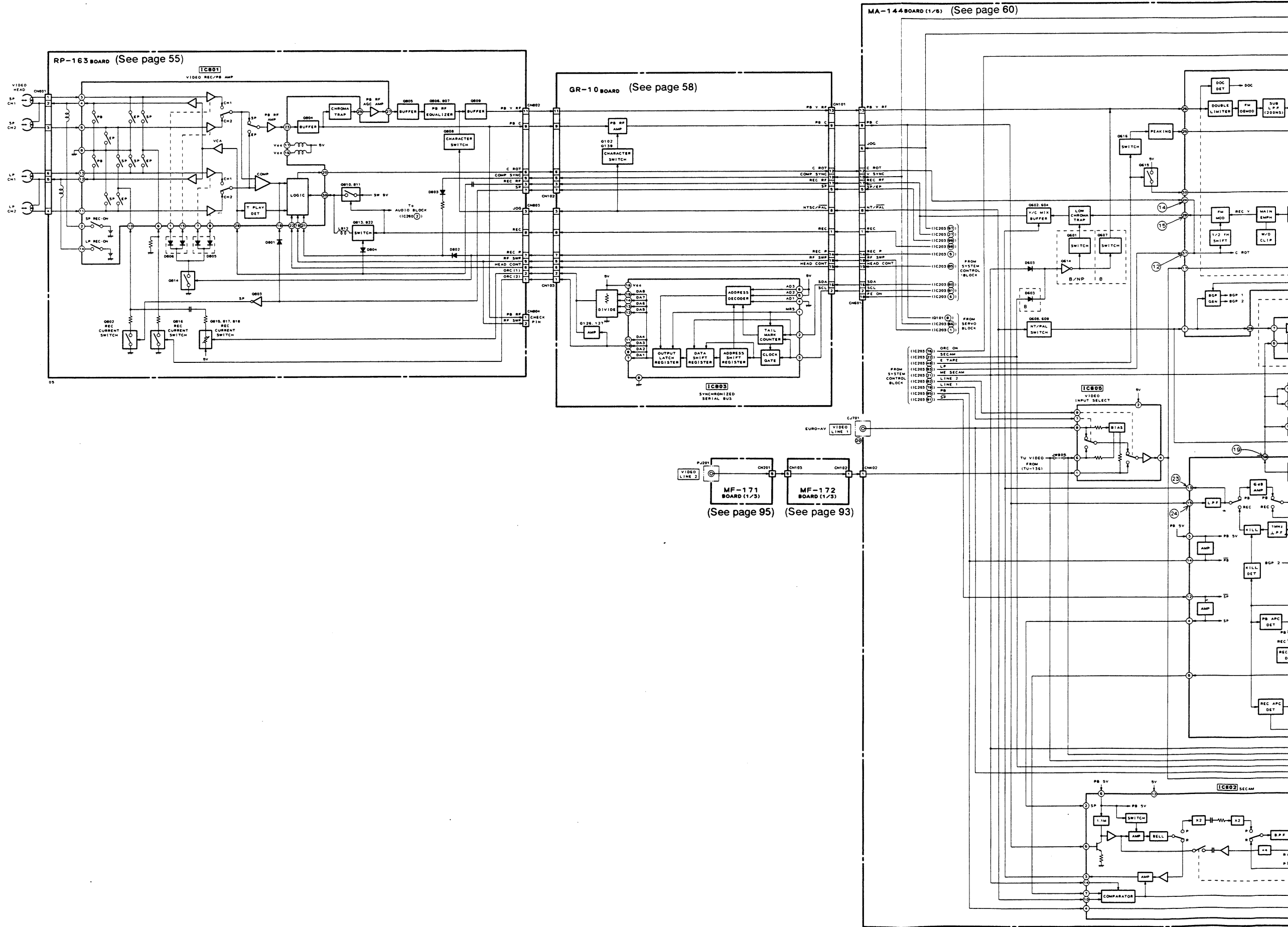


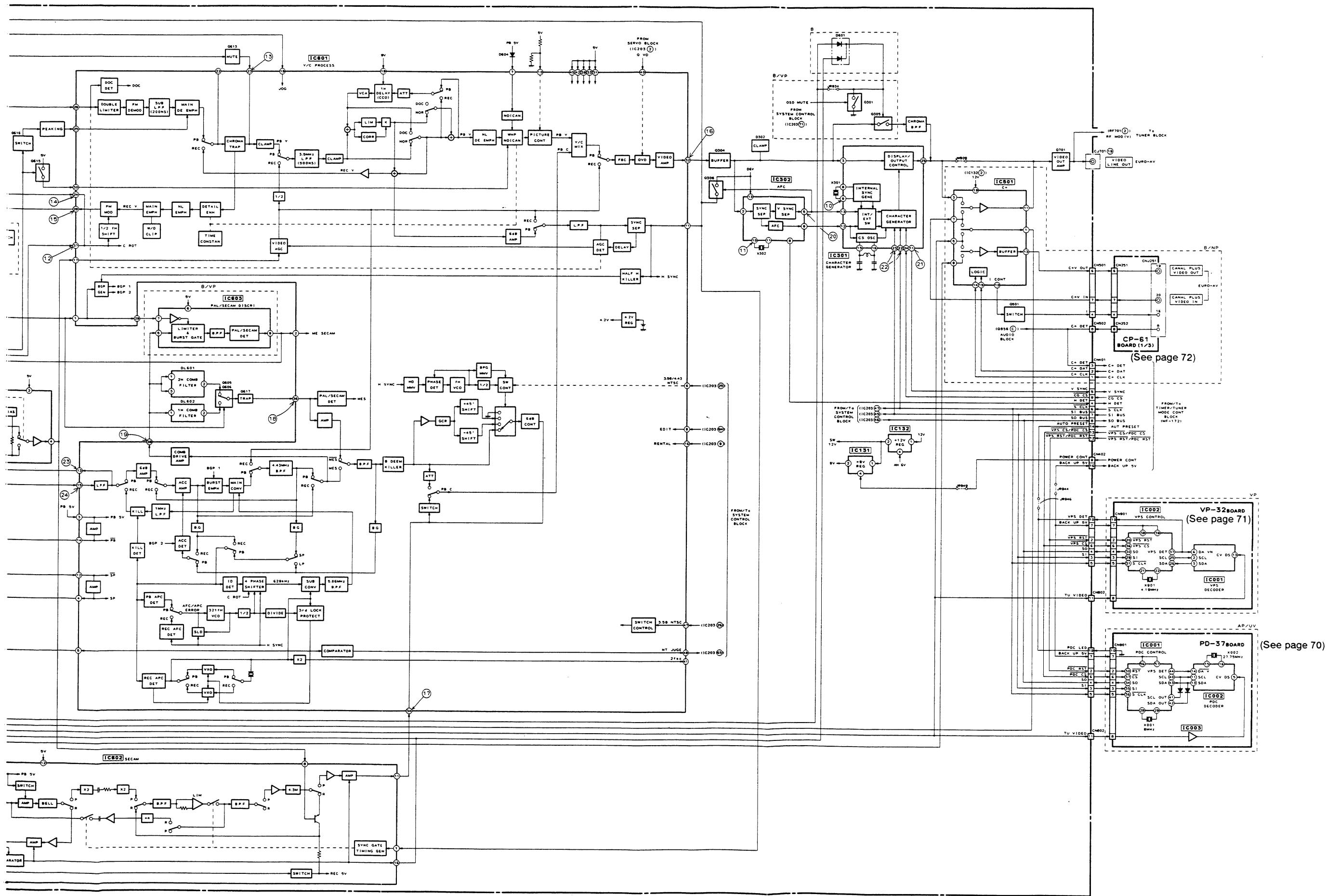
U-136 BOARD



3-3. VIDEO BLOCK DIAGRAM

- Circled numbers refer to waveforms on page 57 to 59 for RP-163 board, pages 69 and 77 for MA-144 board.





3-4. SYSTEM CONTROL – VIDEO BLOCK INTERFACE

Signal	Pin No.	I/O	STOP/ FF/ REW	TAPE THREAD- ING	TAPE UNTHREAD- ING	PB	PB- PAUSE	SLOW	×2	CUE	REVIEW	REC	REC- PAUSE
V·PB	MA-144 IC203 ⑤	O	H	H	H	L	L	L	L	L	L	H	H
HEAD CONT	MA-144 IC203 ⑤	O	L	L	L	L	HI-Z (2.5 V)	*1	*10	*5	*5	L	L
RF SW P (SW30)	MA-144 IC203 ①	O	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2
Q VD/V MUTE	MA-144 IC203 ②	O	L	L	L	*3	*4	*4	*4	*4	*4	L	L
SP	MA-144 IC203 ⑨	O	*6	*6	*6	*7	*7	*7	*7	*7	*7	*6	*6
EP	MA-144 IC203 ⑩	O	*12	*12	*12	*7	*7	*7	*7	*7	*7	*12	*12
LP	MA-144 IC203 ⑩	O	*13	*13	*13	*7	*7	*7	*7	*7	*7	*13	*13
REC·P	MA-144 IC203 ⑤	O	L	L	L	L	L	L	L	L	L	L	H
REC	MA-144 IC203 ⑤	O	L	L	L	L	L	L	L	L	L	H	H
V SYNC	MA-144 IC203 ⑥	I	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8	*8
OSD MUTE	MA-144 IC203 ⑦	O	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9	*9
EDIT	MA-144 IC203 ⑨	O	*11	*11	*11	*14	*14	*14	*14	*14	*14	*11	*11
E TAPE	MA-144 IC203 ⑨	O	H	H	H	*15	*15	*15	*15	*15	*15	H	H
RENTAL	MA-144 IC203 ⑨	O	L	L	L	*16	*16	*16	*16	*16	*16	L	L
NTSC/PAL	MA-144 IC203 ⑦	O	*17	*17	*17	*18	*18	*18	*18	*18	*18	*17	*17
3.58NTSC	MA-144 IC203 ⑥	O	*19	*19	*19	*20	*20	*20	*20	*20	*20	*19	*19
3.58/4.43NTSC	MA-144 IC203 ⑥	O	*17	*17	*17	*21	*21	*21	*21	*21	*18	*17	*17
JOG	MA-144 IC203 ⑦	O	L	L	L	L	H	H	H	H	H	L	L
SECAM	MA-144 IC203 ②	I/O	*22	*22	*23	*24	*24	*24	*24	*24	*24	*22	*22
MESECAM	MA-144 IC203 ②	I/O	*22	*22	*23	*23	*23	*23	*23	*23	*23	*22	*22
ORC SETtei	MA-144 IC203 ⑦	O	L	L	L	L	L	L	L	L	L	*25	*25
ORC SETtei	RP-149 IC803 ⑦	O	H	H	H	H	H	H	H	H	H	*26	*26
E TAPE	RP-149 IC803 ⑨	O	L	L	L	*27	*27	*27	*27	*27	*27	L	L
ORC DEFAULT	RP-149 IC803 ⑩	O	*28	*28	*28	H	H	H	H	H	H	*28	*28
NTSC	RP-149 IC803 ⑪	O	*17	*17	*17	*18	*18	*18	*18	*18	*18	*17	*17

- *1. Forward slow mode: "HI-Z (2.5 V)" in tape stop, "L" in tape running (approx. 40 msec.).
Forward slow mode: "HI-Z (2.5 V)" in tape stop, "H" in tape running SP mode (approx. 40 msec.).
"L" in tape running EP mode (approx. 40 msec.).

- *2. Synchronized with drum rotation. 30 Hz 50% duty pulse.
*3. Normally "L". "H" when CTL signal is not generated.
*4. V period "H" pulse.
*5. "H" in SP mode. "L" in EP mode.
*6. Selected by REC mode. SP mode: "L".
*7. Selected by tape recording mode.

Model	SP	LP	EP
Signal			
SP ⑨	L	H	H
EP ⑩	L	L	H
LP ⑩	L	H	L

- *8. Composite Sync signal (positive).
*9. "L" when menu screen or blue back screen.
*10. "HI-Z (2.5 V)" in EP mode. "H" in SP mode.
*11. Selected by "PICTURE SW": "H" in EDIT position.
*12. Selected by REC mode: "H" EP mode.
*13. Selected by REC mode: "H" LP mode.
*14. Selected by "PICTURE SW": "H" in EDIT position. "H" when "E TAPE" is "H" (Euro model, PAL PB).
*15. "L" when APC is off. "H" when APC is ON and "HG tape" is used.
*16. Selected by "PICTURE SW": "H" in RENTAL position or "H" when Low grade tape is used in APC ON mode.
*17. "H" when input signal is NTSC mode (GA-PAL model) (Euro-PAL mode).
"H" when input signal is NTSC mode (NTSC model).
*18. Selected by "Color system SW": "H" in NTSC mode (GA-PAL, Euro-PAL model).
"H" (NTSC model).
*19. "H" when input signal is NTSC3.58 mode (GA-PAL model).
"L" (Euro-PAL, NTSC model).
*20. Selected by "NTPB SW": "H" in NTSC3.58 position.
*21. Selected by "NTPB SW": "H" in NTSC3.58 or 4.43 position.
*22. "L" when input signal is NTSC mode, "HI-Z" in PAL/SECAM/MESECAM mode (GA-PAL, Euro-PAL model).
"L" (NTSC model).
*23. Selected by "Color system SW": "L" in NTSC mode, "HI-Z" in PAL/SECAM/MESECAM mode.
*24. Selected by "Color System SW": "L" in NTSC mode or PAL/SECAM/MESECAM – LP mode.
"HI-Z" in (PAL/SECAM/MESECAM) – SP mode.

- *25. "H" during APC measurement.
*26. "L" during APC measurement.
*27. "H" when APC is off. "L" when APC is ON and "HG-tape" is used.
*28. "H" when APC is off or APC measurement is not done.

3-5. SYSTEM CONTROL – SERVO PERIPHERAL CIRCUIT INTERFACE

Signal	Pin No.	I/O	STOP	FF	REW	TAPE THREAD- ING	TAPE UNTHREAD- ING	PB	PB• PAUSE	SLOW	×2	CUE	REVIEW	REC	PEC• PAUSE	PB INDEX WRT/ERS
REC CTL	MA-144 IC203 ⑦	O	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	
CAP STOP	MA-144 IC203 ③⑧	O (O.D)	L	HI-Z (O.D)	HI-Z (O.D)	HI-Z (O.D)	HI-Z (O.D)	HI-Z (O.D)	L	*3	HI-Z (O.D)	HI-Z (O.D)	HI-Z (O.D)	HI-Z (O.D)	HI-Z (O.D)	
STEP PLS	MA-144 IC203 ②④	O	L	L	L	L	L	L	L	*2	L	L	L	L	L	
CTL REC	MA-144 IC203 ②⑧	O	L	L	L	L	L	L	L	L	L	L	L	H	H	H
INDEX	MA-144 IC203 ③⑩	O	L	L	L	L	L	L	L	L	L	L	L	L	L	H
PB CTL	MA-144 IC203 ⑥⑦	I	H	*6	*6			*1	H/L	*2	*6	*6	*6	*1	H	
VD CTL	MA-144 IC203 ⑦⑦	I	H	*6	*6			*1	H/L	*2	*6	*6	*6	*1	H	
DRUM PG	MA-144 IC203 ⑥⑧	I	*4	*7	*7	*5	*5	*7	*7	*7	*7	*7	*7	*7	*7	
DRUM FG	MA-144 IC203 ⑥⑨	I	*4	*8	*8	*5	*5	*8	*8	*8	*8	*8	*8	*8	*8	
CAP FG	MA-144 IC203 ⑦⑩	I	H/L	*6	*6	*5	*5	*6	H/L	*9	*6	*6	*6	*6	H/L	
CAP RVS	MA-144 IC203 ⑦②	O	H/L	L	H	L	H	L	L	*2	L	L	H	L	L	
CAP DA	MA-144 IC203 ⑦③	O	*10	*10	*10	*10	*10	*11	*10	*10	*11	*11	*11	*11	*10	
DRUM DA	MA-144 IC203 ⑦④	O	*12	*12	*12	*12	*12	*12	*12	*12	*12	*12	*12	*12	*12	
CTL STEP	MA-144 IC203 ②⑨	O	L	L	L	L	L	L	L	*13	L	L	L	L	L	

- *1. 30 Hz or 25 Hz pulse.

*2. Pulse at tape running.

*3. Reverse logic pulse of STEP PLS.

*4. "L" when drum rotation stop.

*5. Unstable period pulse.

*6. Pulse of period in proportion to tape speed.

*7. 30 Hz or 25 Hz pulse.
- *8. 360 Hz or 300 Hz or 180/150 Hz pulse.

*9. Pulse at tape running.

*10. Approx. 2 msec period "H" or "L" pulse.

*11. Approx. 1.5 msec period "H" or "L" pulse.

*12. Approx. 3 msec period "H" or "L" pulse.

*13. "H" when FWD direction and STEP drive.

3-6. SYSTEM CONTROL – MECHANISM BLOCK INTERFACE

Signal	Pin No.	I/O	HI-SPEED REW	EJECTED	CASSETTE LOADING	CASSETTE UNLOAD- ING	TAPE THREAD- ING	TAPE UNTHREAD- ING	STOP	FF	REW	PB	PB• PAUSE	SLOW	×2	CUE	REVIEW	REC	PEC• PAUSE
CAM *1	MA-144 IC203 ⑫	O	L	L	L	L	H	H	L	L	L	L	L	L	L	L	L	L	L
LOAD	MA-144 IC203 ⑭	O	L	L	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L
CW/CCW	MA-144 IC203 ⑬	O			H	L	H	L											
MODE 1	MA-144 IC203 ⑤⑥	I	H	L	L	L	H	H	L	H	H	H	L	L	H	H	H	H	L
MODE 2	MA-144 IC203 ⑤⑦	I	L	H	H	H	H	H	L	L	L	L	H	H	L	L	L	L	H
MODE 3	MA-144 IC203 ⑤⑧	I	H	H	H	H	L	L	L	L	L	H	H	H	H	H	L	H	H
MODE 4	MA-144 IC203 ⑤⑨	I	H	H	H	H	H	H	L	H	H	L	L	L	L	L	L	L	L
REC PRF	MA-144 IC203 ⑮	I	*2	L	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2
C-UP/DOWN	MA-144 IC203 ⑮	I	L	H	H→L	L→H	L	L	L	L	L	L	L	L	L	L	L	L	L
TREEL FG	MA-144 IC203 ⑥④	I	*3	H/L	H/L	H/L	H/L	H/L	H/L	*3	*3	*3	H/L	*3	*3	*3	*3	*3	H/L
SREEL FG	MA-144 IC203 ⑥③	I	*3	H/L	H/L	H/L	*3	*3	H/L	*3	*3	*3	H/L	*3	*3	*3	*3	*3	H/L
END LED	MA-144 IC203 ③②	O (O.D)	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4
CAP TRQ 1	MA-144 IC203 ③③	O (O.D)	*1							*1	*1			*6		*1	*1		
CAP TRQ 2	MA-144 IC203 ③④	O (O.D)								*1	*1								
CAP STOP	MA-144 IC203 ③⑧	O (O.D)	H	L	L	L	H	H	L	H	H	H	L	*5	H	H	H	H	L
CAP RVS	MA-144 IC203 ⑦⑦	O	H	H			L	H	H/L	L	H	L	L	L/*5	L	L	H	L	L
CAP DA	MA-144 IC203 ⑦⑧	O																	
T SENS	MA-144 IC203 ⑦①	I	*7	*4	*4	*4	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7
S SENS	MA-144 IC203 ⑦⑧	I	*7	*4	*4	*4	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7	*7

*1. “H” when mechanism mode transition.

*2. “L” when erasing protection tab is bent, “H” when not bent.

*3. Pause of period in proportion to reel rotating speed.

*4. Approx. 2 msec period “H” pulse.

*5. Pulse at tape running.

*6. “L” when tape running and CAP RVS is “H”.

*7. Normally “L”. 2 msec period “H” pulse when tape top or tape end is detected.

3-7. SYSTEM CONTROL – SYSTEM CONTROL PERIPHERAL CIRCUIT INTERFACE

Signal	Pin No.	I/O	I/O level
COSMO•RESET	MA-144 IC203 ④⑩	I	Normally “H”. “L” when service interruption is detected or restored.
COSMO•CS	MA-144 IC203 ④④	I	Chip select signal from timer microprocessor. V period “L” pulse.
SI•BUS	MA-144 IC203 ④⑤	I	Serial communication data from timer microprocessor. V period “L” pulse.
SO•BUS	MA-144 IC203 ④⑥	O	Serial communication data to timer microprocessor. V period “L” pulse.
S CLK	MA-144 IC203 ④⑦	I	Serial communication clock with timer microprocessor. V period “L” pulse.

3-8. SYSTEM CONTROL – AUDIO BLOCK INTERFACE

Signal	Pin No.	I/O	STOP/FF/REW	TAPE LOADING	TAPE UNLOAD-ING	PB	PB• PAUSE	SLOW	×2	CUE	REVIEW	REC	REC• PAUSE
AF PB	MA-144 IC203 ⑤⑥	O	L	L	L	H	H	H	H	H	H	H	L
STEREO/L•R	MA-144 IC203 ⑤⑧	I/O	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1
HiFi/M/N	MA-144 IC203 ⑤⑨	I/O	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1
AF ENVELOP	MA-144 IC203 ⑥①	I	AF RF envelope signal input terminal for automatic tracking.										
NA PB	MA-144 IC203 ⑥①	O	L	L	L	H	H	H	H	H	H	L	L
A MUTE	MA-144 IC203 ⑥⑦	O (O.D)	L	L	L	*4	H	H	H	H	H	L	L
SP	MA-144 IC203 ⑥⑨	O	*2	*2	*2	*3	*3	*3	*3	*3	*2	*2	*2
NA REC•P	MA-144 IC203 ⑥⑩	O	L	L	L	L	L	L	L	L	L	H	L
AF REC•P	MA-144 IC203 ④④	O	L	L	L	L	L	L	L	L	L	H	L
AF SWP	MA-144 IC203 ⑥⑩	O	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4	*4
AF SW POSITION	MA-144 IC203 ⑥⑤	I	Input terminal for AF switching position adjustment.										
FULL ERS	MA-144 IC203 ⑥⑥	O (O.D)	H	H	H	H	H	H	H	H	H	L	H

*1. Selected by audio monitor.

Signal	Audio Monitor	STEREO OR MAIN, SUB, L, R	MAIN L	SUB R	(NORMAL)	HiFi MIX
STEREO/L•R		H	M (HI-Z)	L	X	H
HiFi/M/N		L	L	L	H	M (HI-Z)

- *2. Selected by REC mode selector. SP mode: “L”.
- *3. Selected by tape recording mode. SP mode: “L”.
- *4. 30 Hz or 25 Hz, 50% duty pulse approx. 5 msec delayed from RF SW P.

3-9. SYSTEM CONTROL – TUNER BLOCK INTERFACE

Signal	Pin No.	I/O	I/O level
TAMUTE	MA-144 IC203 ②③	O	Tuner audio mute output. “H” when not used channel is selected.

3-10. SYSTEM CONTROL AND RF MODULATOR – INPUT SELECTION BLOCK INTERFACE

Signal	Pin No.	I/O	I/O level
AV CONT	MA-144 IC203 ①⑨	O	“L” when RF modulator through.
LINE 1	MA-144 IC203 ⑦⑨	O	*1. Input select control signal.
LINE 2	MA-144 IC203 ⑦②	O	

*1.

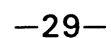
Input Signal	Tuner	LINE 1	LINE 2
LINE 1 ⑦⑨	L	H	L
LINE 2 ⑦②	L	L	H

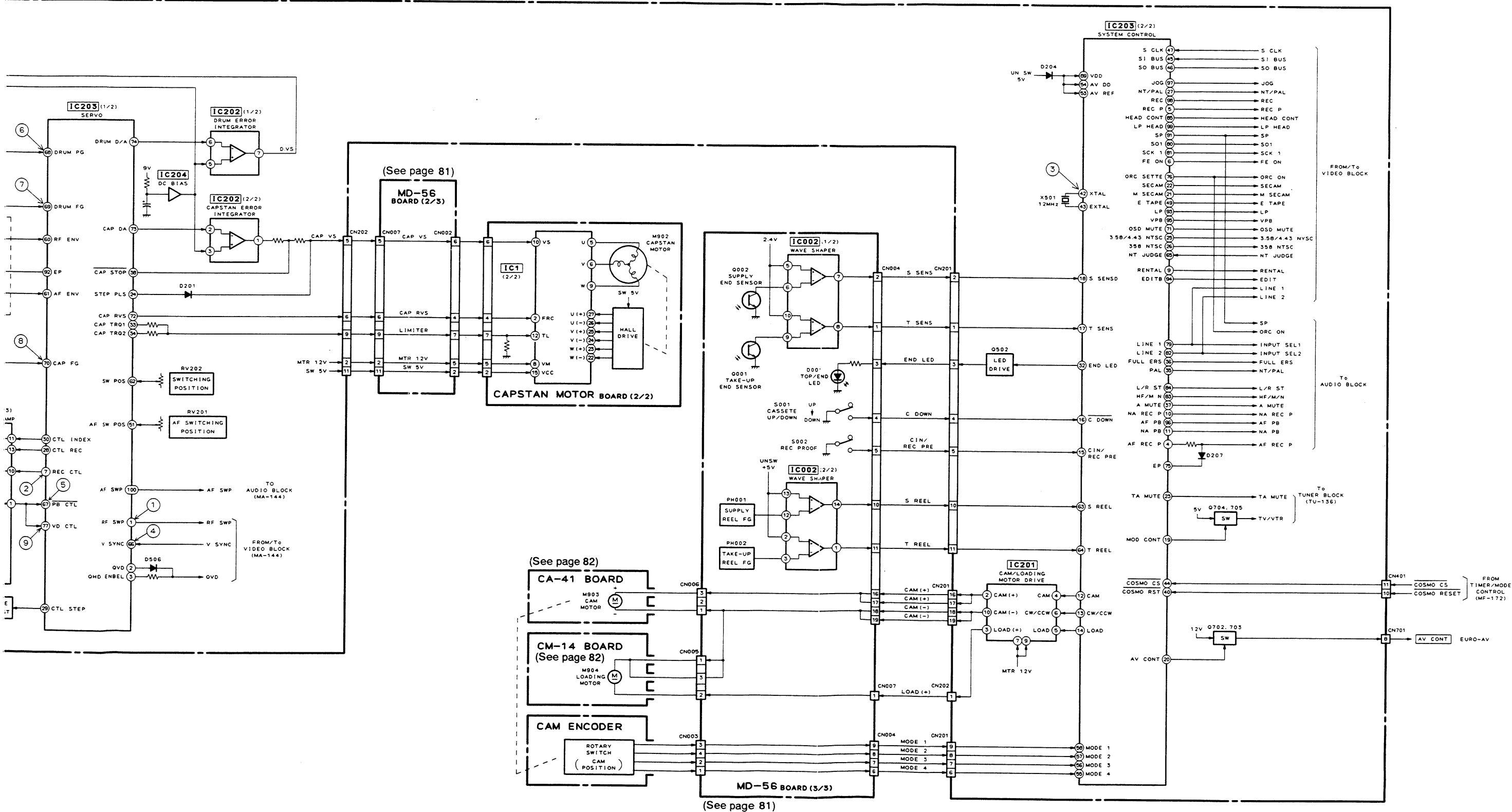
3-11. SERVO SYSTEM CONTROL – MICROPROCESSOR PIN FUNCTION (MA-144 BOARD IC203)

Pin No.	Port	I/O	Signal	Function
1	PB5/PPO13	O	RF SWP	Video switching pulse output
2	PB4/PPO12	O	Q VD	False VD pulse output
3	PB3/PPO11	O	Q HD ENBL	False HD voltage level control
4	PB2/PPO10	O	AF REC $\bar{P}$	"H" output when hi-fi audio REC
5	PB1/PPO9	O	RECP	"H" output when video REC•PAUSE
6	PB0/PPO8	O	FE ON	Flaying erase ON/OFF
7	PC7/RTO7	O	REC CTL	REC CTL output
8	PC6/RTO6	O	INT VD	Internal VD signal. Not used
9	PC5/RTO5	O	RENTAL	"H" output when "RENTAL" or "Low grade TAPE" PB
10	PC4/RTO4	O	NA RECP	"H" when normal audio REC
11	PC3/RTO3	O	NA PB	"H" when normal audio playback
12	PC2/PPO18	O	CAM	CAM motor select
13	PC1/PPO17	O	CW	Clockwise/counterclockwise signal output
14	PC0/PPO16	O	LOAD	Load motor select
15	PJ7	I	CIN/REC PRF	Erasing protection tab, cassette IN detection input
16	PJ6	I	C DOWN	Cassette up/down detection input
17	PJ5	I	T SENS	T end sensor input
18	PJ4	I	S SENS	S end sensor input
19	PJ3	O	MOD CONT	RF modulator ON/OFF control
20	PJ2	O	AV CONT	Euro 21 pin TV/VTR control
21	PJ1	I/O	MESECAM	"L" in NT mode. "HI-Z" in PAL (50 Hz) mode
22	PJ0	I/O	SECAM	"L" in NT mode. "HI-Z" in PAL (50 Hz) mode
23	PD7	O	TA MUTE	Tuner audio MUTE signal
24	PD6	O	STEP PLS	"H" when capstan step drive
25	PD5	O	3.58/4.43 NTSC	"H" when 3.58 or 4.43 NTSC PB
26	PD4	O	3.58 NTSC	"H" when 3.58 NTSC PB
27	PD3	O	NTSC/PAL	"H" when NTSC mode
28	PD2	O	CTL REC	"H" when CTR writing
29	PD1	O	CTL STEP	STEP motion control of CTL amp
30	PD0	O	INDEX	Index control. "H" when playback index writing or erasing
31	PH7	O		Not used
32	PH6	O	END LED	END sensor lamp drive output
33	PH5	O	CAP TPQ2	Capstan current control. "L" when FF/REW → stop
34	PH4	O	CAP TPQ1	Capstan current control. "L" when slow down
35	PH3	O	PAL	"H" when PAL mode
36	PH2	O	FULL ERS	"L" when full erase head operation
37	PH1	O	A MUTE	Audio MUTE output
38	PH0	O	CAP STOP	Capstan STOP signal output
39	MP	I	MP	Fixed at "L" level
40	$\bar{RST}$	I	COSMO $\bar{RST}$	System reset input
41	Vss			GND
42	XTAL		XTAL	System clock 12 MHz
43	EXTAL		EXTAL	
44	$\bar{CSO}$	I	COSMO CS	Chip select signal
45	SI0	I	SI0	Signal for serial communication
46	SO0	O	SO0	
47	$\bar{SCKO}$	I	$\bar{SCKO}$	
48	PF7/AN11	O	AMS MUTE	Not used
49	PF6/AN10	O	E TAPE	"H" when "HG-TAPE" PB

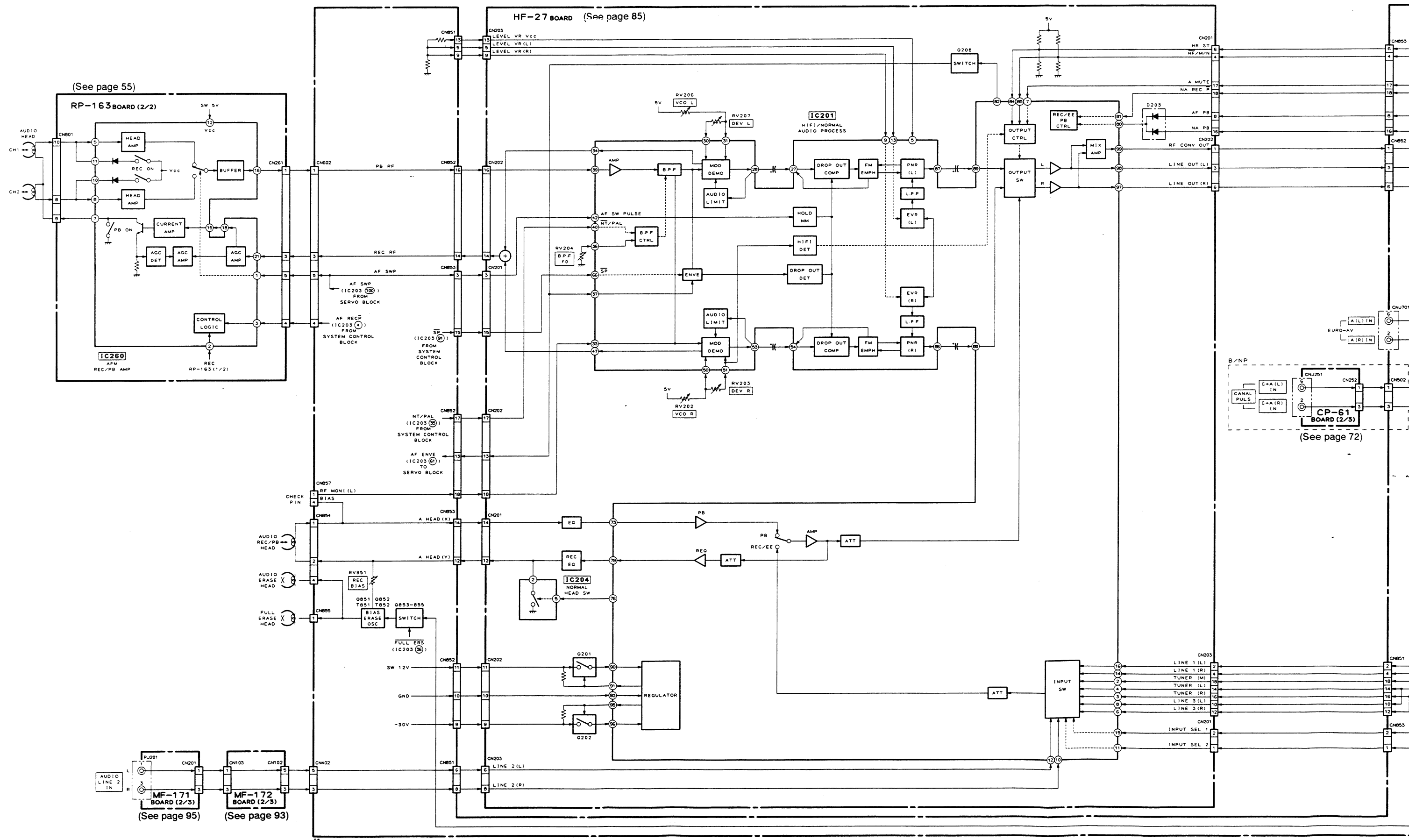
Pin No.	Port	I/O	Signal	Function
50	PF5/AN9	I	K MODE	Not used
51	PF4/AN8	I	AF SW POSI	VR input for hi-fi switching pulse position adjustment
52	AVss		AVss	GND
53	AVREF		AVREF	AD port reference input. UNSW 5 V
54	AVDD		AVDD	UNSW 5 V
55	PF3/AF7	I	MODE4	Mechanism section CAM encoder input
56	PF2/AN6	I	MODE3	
57	PF1/AN5	I	MODE2	
58	PF0/AN4	I	MODE1	
59	AN3	I	DEW	DEW sensor input
60	AN2	I	RF ENV	Video RF envelope input
61	AN1	I	AF ENV	hi-fi audio RF envelope input
62	AN0	I	RF SW POSI	VR input for SWP adjustment
63	PG7/EX11	I	SREEL FG	S reel sensor input
64	PG6/EX10	I	TREEL FG	T reel sensor input
65	PG5/SYNC1	I	NT JUDGE	3.58/4.43 NTSC judgement input
66	PG4/SYNC0	I	V SYNC	Composite sync input
67	PG3/PBCTL	I	PB CTL	Playback CTL input
68	PG2/DPG	I	DRM PG	Drum PG input
69	PG1/DFG	I	DRM FG	Drum FG input
70	PG0/CFG	I	CAP FG	Capstan FG input
71	PE7/DAB1	O	OSD MUTE	Video putput mute signal
72	PE6/DAB0	O	CAP RVS	Capstan reverse signal output
73	PE5/DAA1	O	CAP D/A	Capstan error D/A output
74	PE4/DAA0	O	DRM D/A	Drum error D/A output
75	PE3/PWM1	O	EP	"L" when EP mode REC/PB
76	PE2/PWM0	O	ORC SETTEI	"H" when ORC measurement
77	PE1/EC/INT	I	VD CTL	Playback CTL input
78	PE0/INT0	I	AMS IN	Not used
79	PI7/SIL	O	LINE1	Video/audio input select signal
80	PI6/SOL	O	EXP SO	Expansion port serial communication
81	PI5/SCKL	O	EXP CLK	
82	PI4/INT1	O	LINE2	Video/audio input select signal
83	PI3/TO	I/O	HiFi/M/N	Audio output control signal
84	PI2/PWM	I/O	STEREO/L/R	
85	PI1/PO	I/O	HEAD CONT	Head select control
86	TEX	I		Not used
87	TX	O		Not used
88	Vss			GND
89	VDD			UNSW 5 V
90	N.C.			Connected to UNSW 5 V
91	PA7/PPO7	O	SP	"L" when SP mode
92	PA6/PPO6	O	ENV GAIN	RF envelope gain control
93	PA5/PPO5	O	LP	"H" when LP mode
94	PA4/PPO4	O	EDIT	"H" when EDIT
95	PA3/PPO3	O	V PB	"L" when video playback
96	PA2/PPO2	O	AF PB	"H" when hi-fi audio playback
97	PA1/PPO1	O	JOG	"H" when trick play mode
98	PA0/PPO0	O	REC	Rise up signal of head amp recording power
99	PB7/PPO15	O	LP HEAD	(PAL) Head select control
100	PB6/PPO14	O	AF SWP	hi-fi switching pulse output

- **Circled numbers refer to waveforms on page 69 for MA-144 board.**





3-13. AUDIO BLOCK DIAGRAM



3-14. TIMER, TUNER MODE CONTROL MICROCOMPUTER PIN FUNCTION
(MF-172 BOARD IC101 MB89095116)

No.	Port Name	I/O	Signal Name	Contents
1	CL1		32K X'tal	Connect oscillator for clock
2	CL0		32K X'tal	Connect oscillator for clock
3	MOD0		GND	
4	MOD1		GND	
5	X0		X'tal	Connect main oscillator
6	X1		X'tal	Connect main oscillator
7	Vss		GND	
8	XRST	I	$\overline{\text{RESET}}$	Reset signal input
9	P00/E120	O	PLL ENABLE	Tuner enable signal
10	P01/E121	O	PLL DATA	Tuner data signal
11	P02/E122	O	PLL CLOCK	Tuner clock signal
12	P03/E123	O	$\text{SYS2}/\overline{\text{VPS CS}}/\overline{\text{PD CCS}}$	Tuner system select signal 2 (E7B) VPS chip select (E7VP), PDC chip select (E7AP/UY/E8UV)
13	P04/E124	O	$\text{SYS1}/\overline{\text{VPS RST}}/\overline{\text{PDC RST}}$	Tuner system select signal 1 (E7B) VPS reset (E7VP), PDC reset (E7AP/UY/E8UV)
14	P05/E125	O	$\overline{\text{COSMO CS}}$	System control chip select signal
15	P06/E126	O	$\overline{\text{COSMO RESET}}$	System control reset signal
16	P07/E127	O	$\overline{\text{CG CS}}$	Character generator chip select signal
17	P10/E110	I	$\overline{\text{POWER FAIL}}$	Power failure detect signal input
18	P11/E111	I	$\overline{\text{V SYNC}}$	V sync. signal input
19	P12/E112	I	H DET	Video signal detect signal input
20	P13/E113	I	C+ DET	CANAL +detection
21	P14	O	C+ DATA	CANAL +control data
22	P15	O	C+ CLK	CANAL +control clock
23	P16	I	SCL	I ² C BUS (Clock)
24	P17	I	SDA	I ² C BUS (Data)
25	P20	O	$\overline{\text{STEREO}}$	Stereo, bilingual, HiFi LED
26	P21	O	$\overline{\text{TIMER}}$	TIMER LED
27	P22	O	$\overline{\text{REC}}$	REC LED
28	CMOD		GND	
29	P24/SI0	O	FF	FF LED
30	P25/SO0	O	FWD	FWD LED
31	P26/SCLK0	O	PAUSE	PAUSE LED
32	P27/RMCI	I	SIRCS IN	SIRCS signal input
33	P30	O	RVS	RVS LED
34	P31	O	REW	REW LED
35	P32	O	H. S. REW	H. S. REW LED

No.	Port Name	I/O	Signal Name	Contents
36	P33/PWMO	O	SAP/MAIN	Not used
37	P34/PPGO	O	N. C.	
38	P35/PPGI	O	POWER CONT	Power ON/OFF control signal
39	FS00	O	S16	FDP Segment 16
40	FS01	O	S15	FDP Segment 15
41	FS02	O	S14	FDP Segment 14
42	FS03	O	S13	FDP Segment 13
43	FS04	O	S12	FDP Segment 12
44	FS05	O	S11	FDP Segment 11
45	FS06	O	S10	FDP Segment 10
46	FS07	O	S09	FDP Segment 9
47	FS08	O	S08	FDP Segment 8
48	FS09	O	S07	FDP Segment 7
49	Vcc	O	5V	
50	FS10	O	S06	FDP Segment 6
51	FS11	O	S05	FDP Segment 5
52	FS12	O	S04	FDP Segment 4
53	Vfdp		- 30V	
54	FS13	O	S03	FDP Segment 3
55	FS14	O	S02	FDP Segment 2
56	FS15	O	S01	FDP Segment 1
57	FS16		N. C.	
58	Vss		GND	
59	FS17		N. C.	
60	FS18		N. C.	
61	FS19		N. C.	
62	FC10/FS20		N. C.	
63	FC10/FS21		N. C.	
64	FC09/FS22		N. C.	
65	FC08/FS23		N. C.	
66	FC07	O	1G	FDP Grid 1
67	Vcc		5V	
68	FC06	O	2G	FDP Grid 2
69	FC05	O	3G	FDP Grid 3
70	FC04	O	4G	FDP Grid 4

No.	Port Name	I/O	Signal Name	Contents
71	FC03	O	5G	FDP Grid 5
72	FC02	O	6G	FDP Grid 6
73	FC01	O	7G	FDP Grid 7
74	FC00		N. C.	
75	P80/STB	O	A INSERT	A INSERT LED
76	P81/XCS	O	V INSERT	Not used
77	P82/SI1	I	SO BUS	Serial data input
78	P83/SO1	O	SI BUD	Serial data input
79	P84/SCLK1	O	S CLK	Clock for serial communication
80	P85/ECK	O	MEM CS	E ² PROM chip select signal
81	P86/T01	O	MEM CLK	E ² PROM clock
82	P87/T02	O	MEM DATA	E ² PROM data
83	AVss		GND	
84	P90/AN00	I	A/D0	Key reading A/D input
85	P91/AN01	I	A/D1	Key reading A/D input
86	P92/AN02	I	A/D2	Key reading A/D input
87	P93/AN03	I	A/D3	Key reading A/D input
88	P94/AN04	I	A/D4	Key reading A/D input
89	P95/AN05	I	A/D5	Key reading A/D input
90	P96/AN06	I	A/D6	Key reading A/D input
91	P97/AN07	O	APC	APC LED
92	AVcc		5V	
93	PA0/AN08		N. C.	
94	PA1/AN09		DEST1	Destination discriminating A/D input
95	PA2/AN10	I	DEST2	Destination discriminating A/D input
96	PA3/AN11	I	AFT	Tuner AFT input
97	PA4/LSI	O	F MONO	Not used
98	PA5/LSO	O	AUTO RESET	Not used
99	PA6/COUT	O	BUZZER	Buzzer output
100	Vcc		5V	

A/D Port Assignment

Port	Level	SW0	SW1	SW2	SW3	SW4	SW5	SW6
AN00		POWER	EJECT					
AN01								
AN02		STOP	REC	PLAY	INPUT SEL	PROGRAM (+)	PROGRAM (-)	TV/VTR (AS MODEL)
AN03		FWD/RVS	PAUSE	H. S. REW			EDIT	RENTAL
AN04		RING2	TIMER REC ON/OFF			COLOR SEL0	COLOR SEL1	COLOR SEL2
AN05		RING1					NTSC PB SEL0	NTSC PB SEL1
AN06		RING0	TEST	X120 (TEST)		APC		
AN07								
AN08								
AN09		DESTINATION						
AN10								
AN11		AFT						

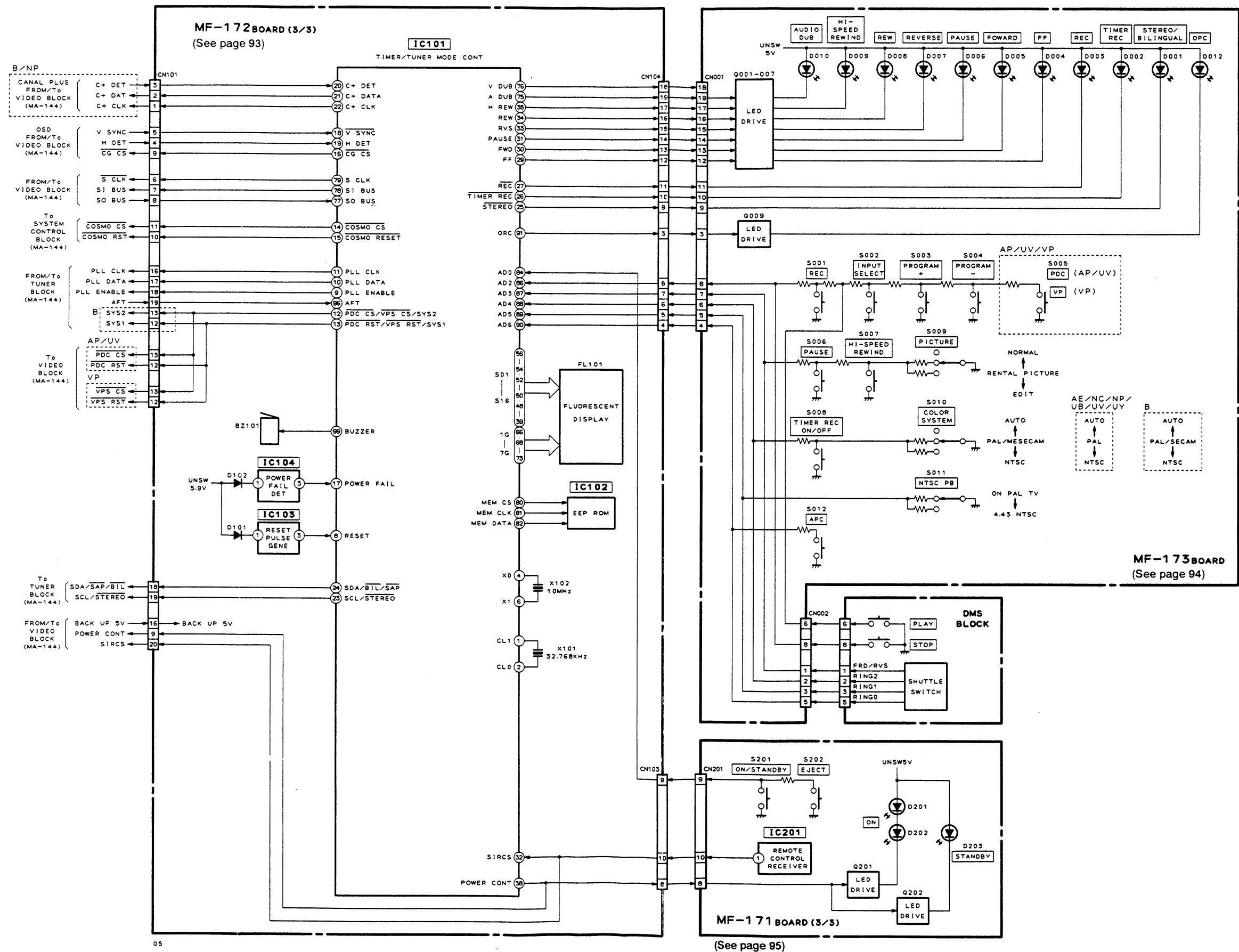
COLOR SELECT SWITCH

SWITCH	MODE	NTSC	PAL	SECAM	AUTO
COLOR SEL0		on	off		off
COLOR SEL1		off	on		off
COLOR SEL2		off	off		off

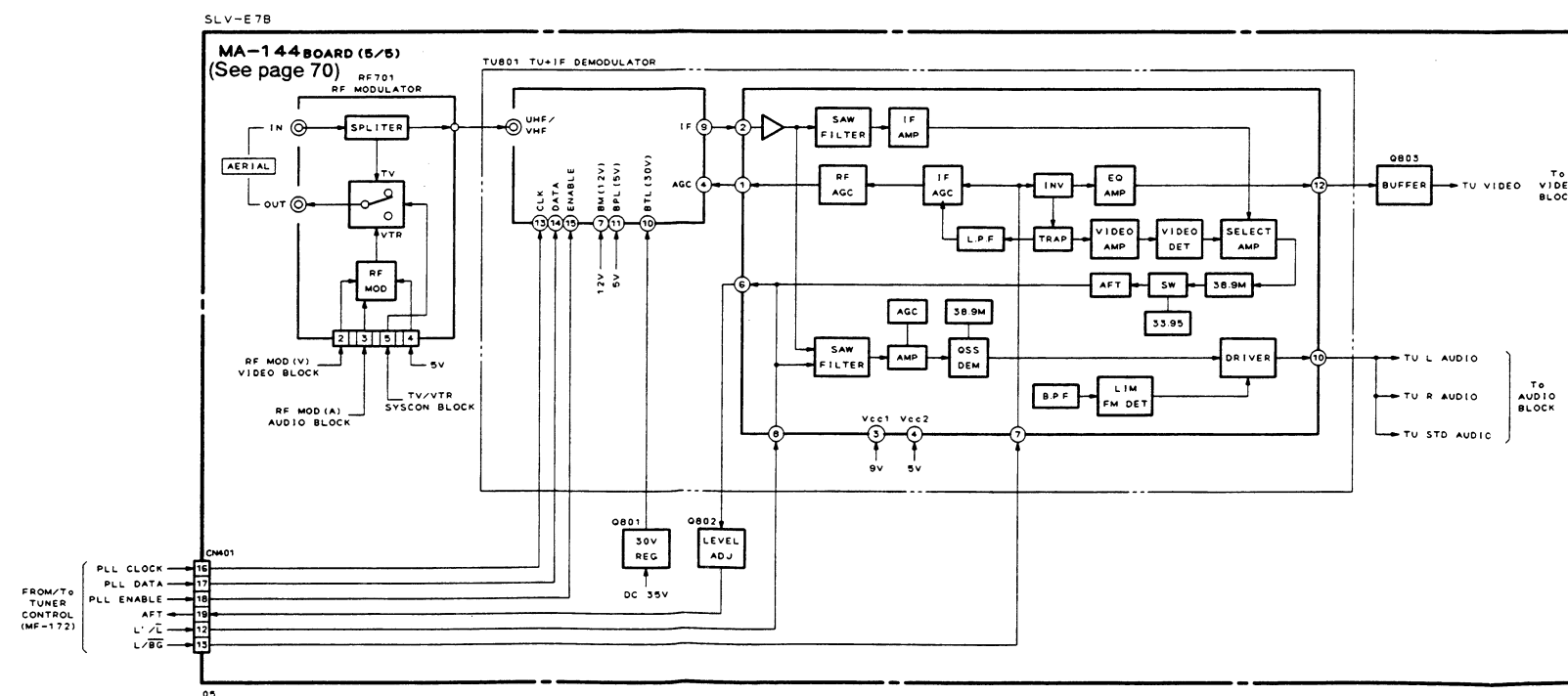
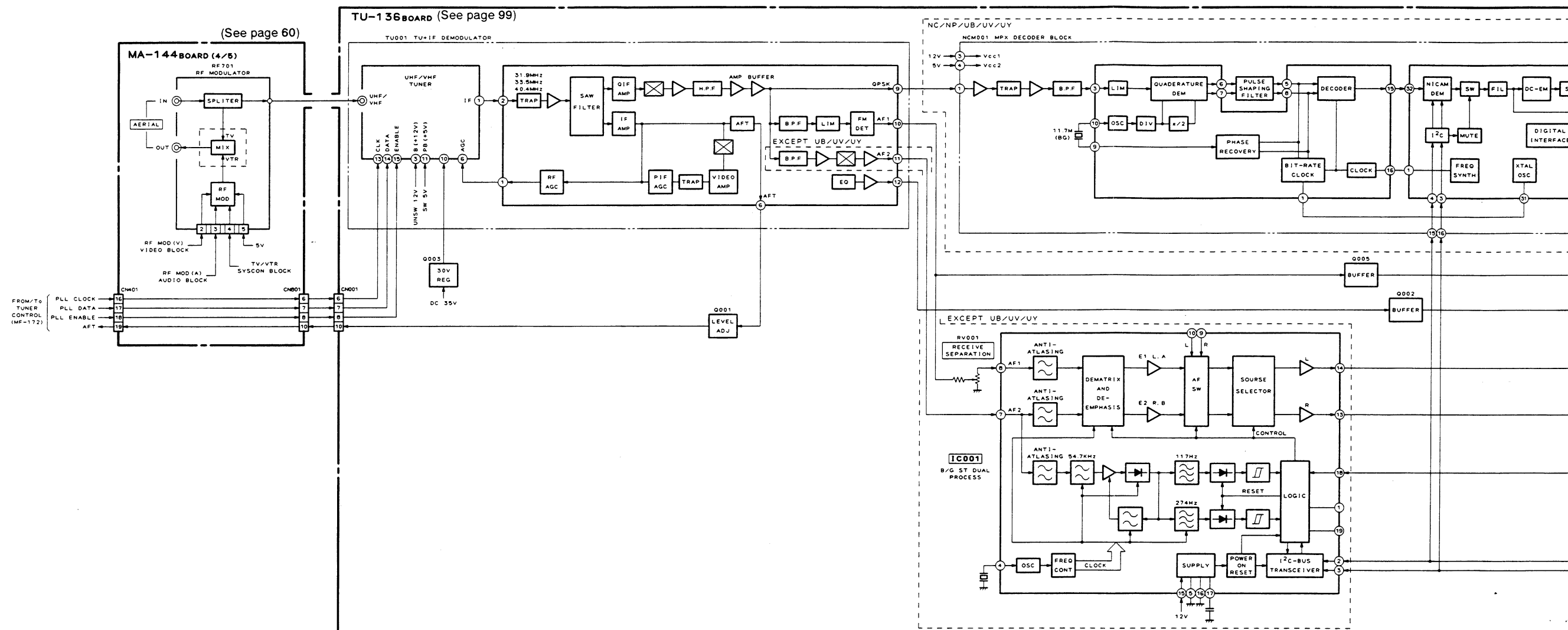
NTSC PB SELECT SWITCH

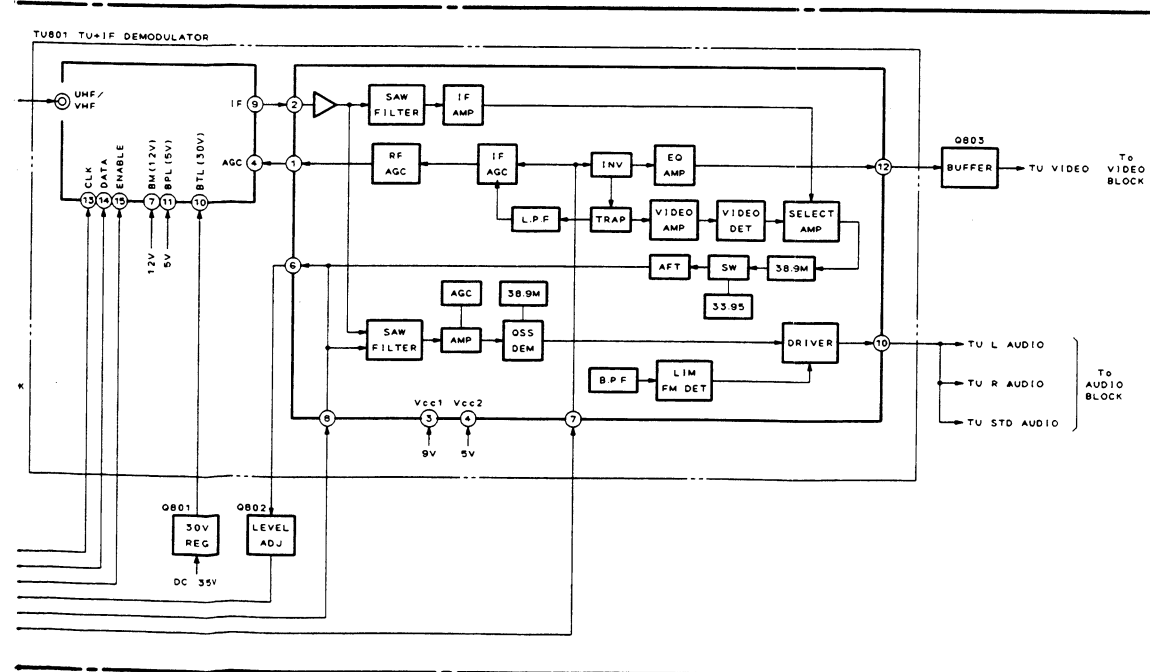
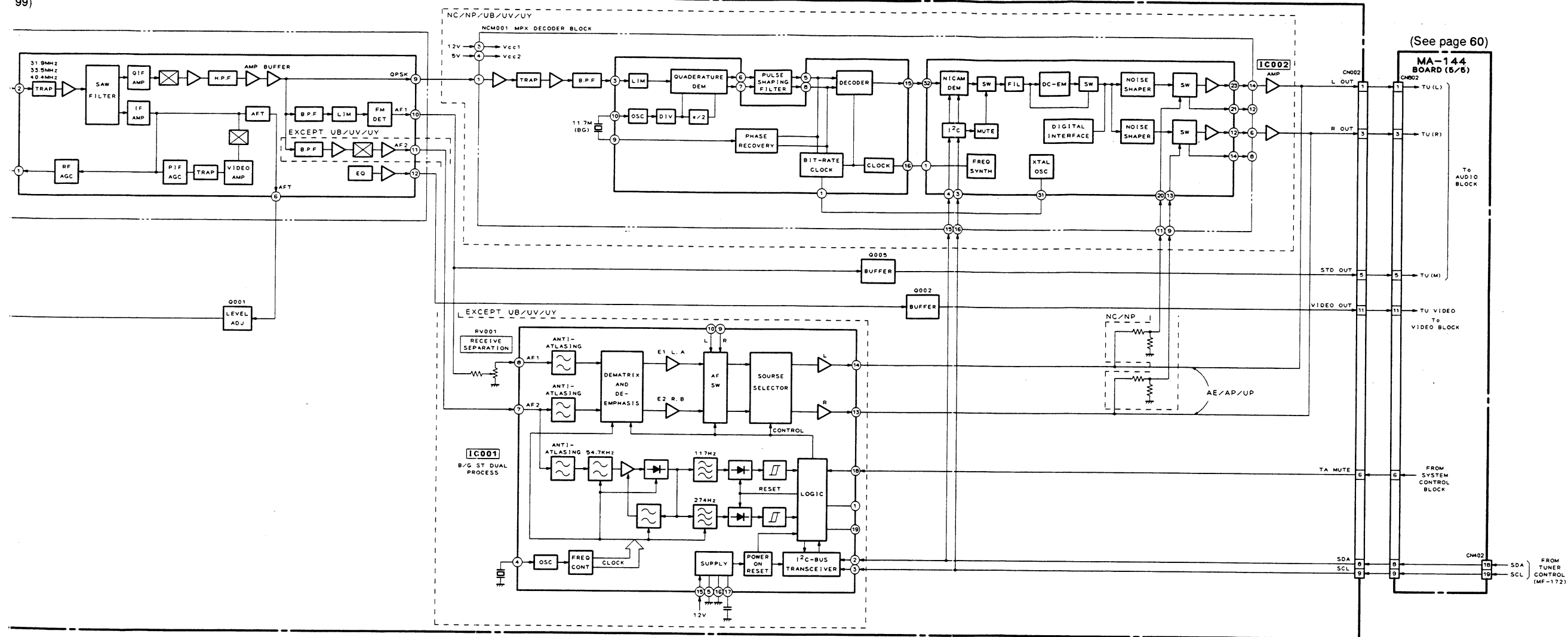
SWITCH	MODE	ON PAL TV	4.43 NYSC
NTSC PB SEL0		on	off
NTSC PB SEL1		off	on

3-15. TIMER, TUNER, MODE CONTROL BLOCK DIAGRAM

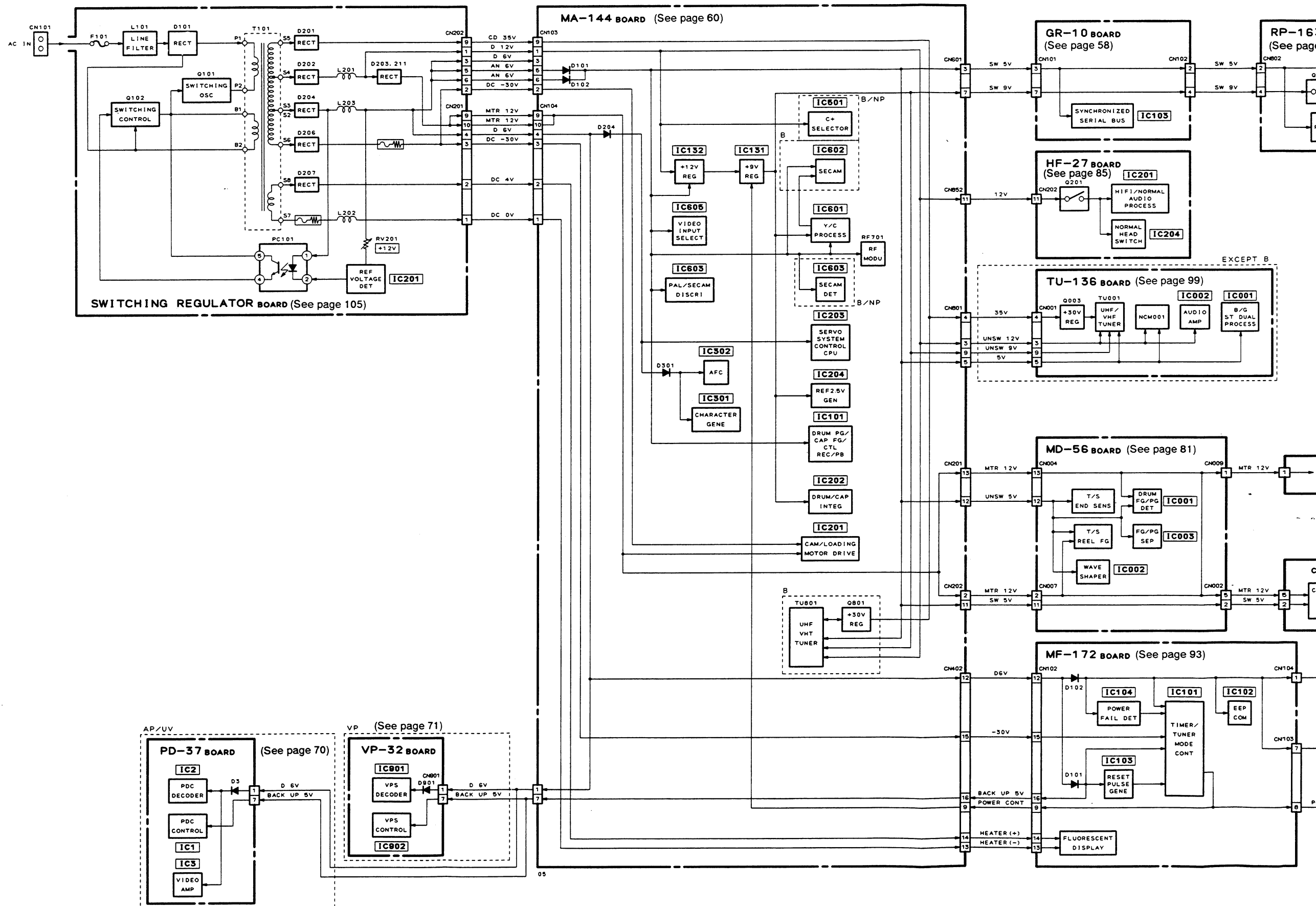


3-16. TUNER BLOCK DIAGRAM





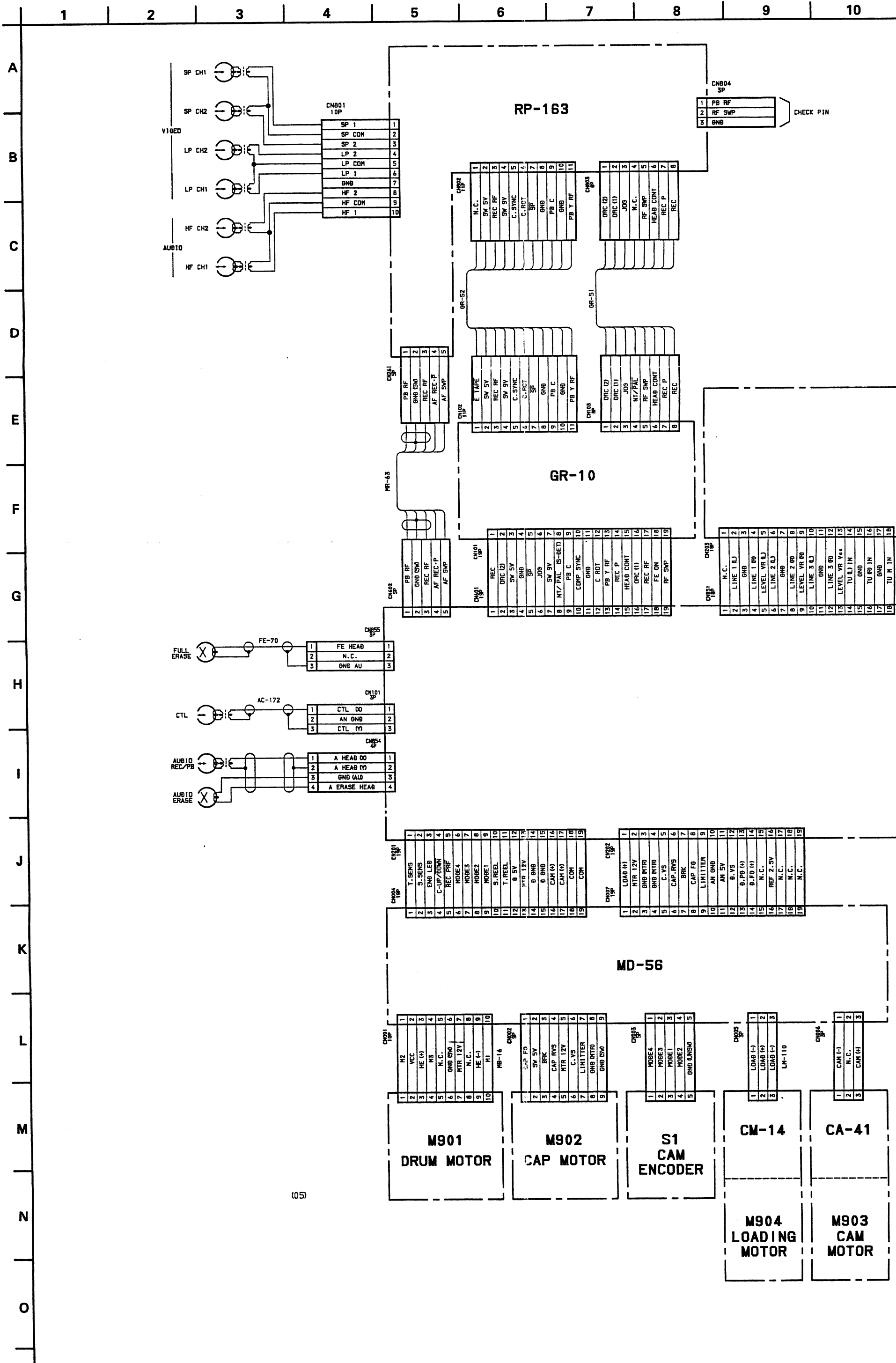
3-17. POWER BLOCK DIAGRAM

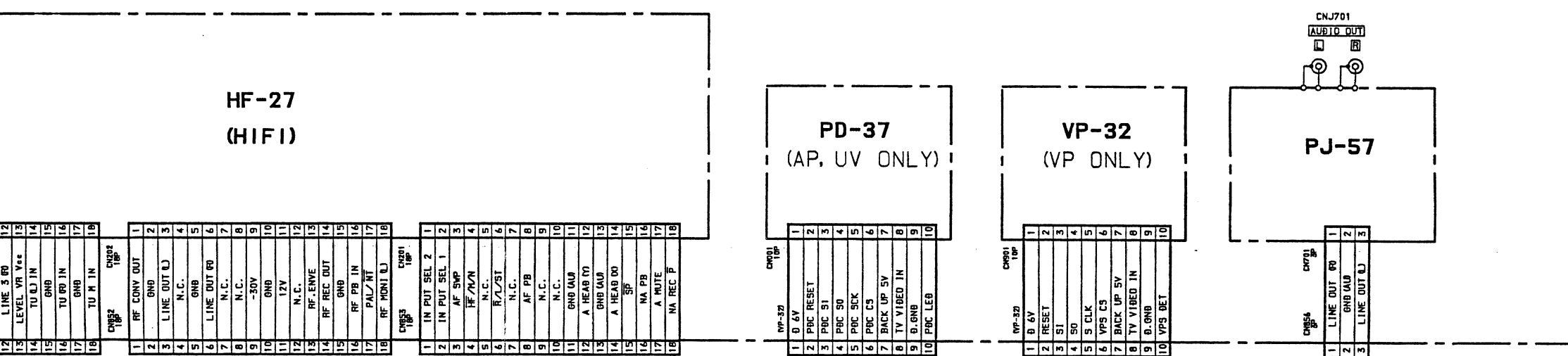


SECTION 4

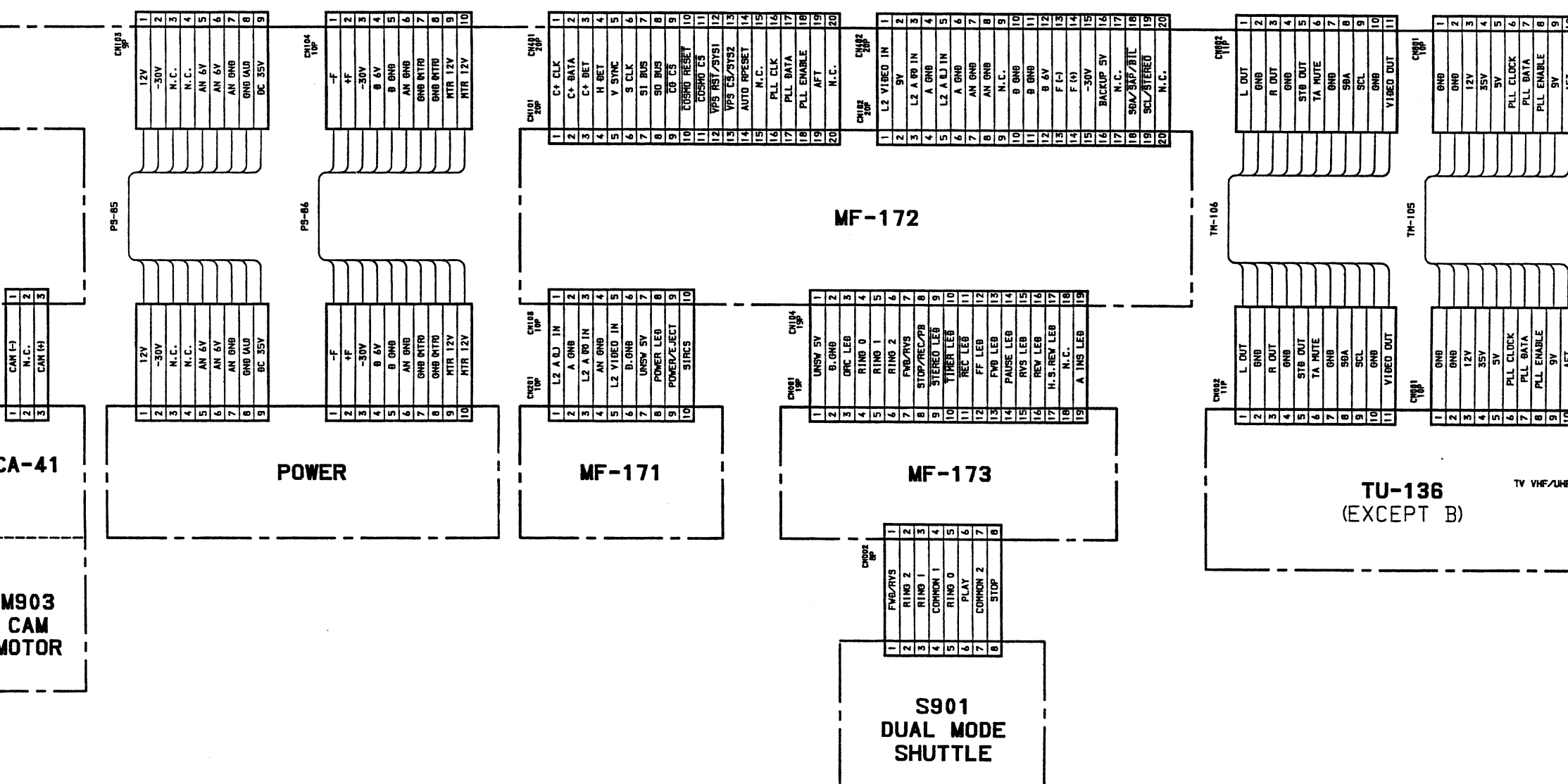
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

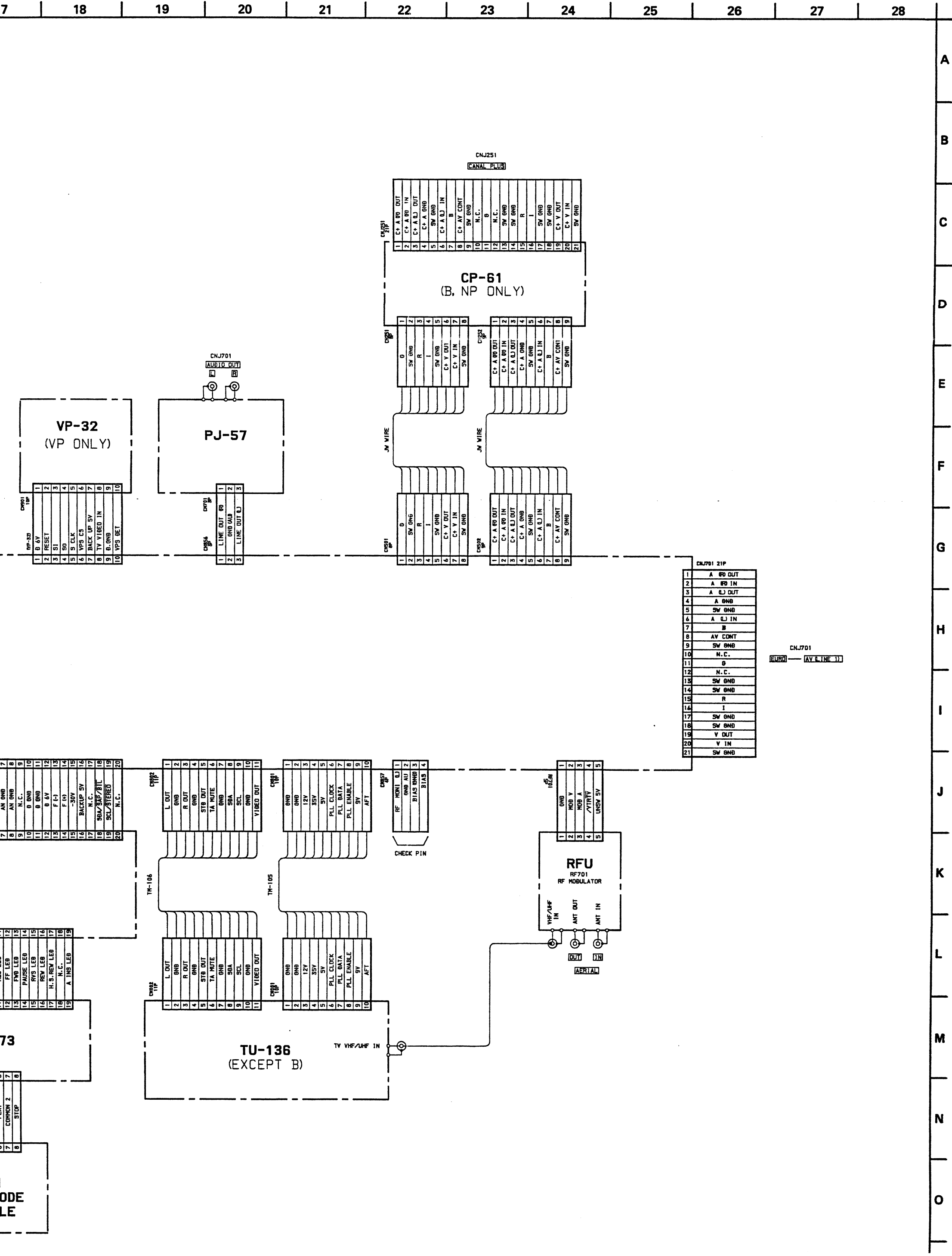
4-1. FRAME SCHEMATIC DIAGRAM





MA-144





4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

- For printed wiring boards:
- indicates a lead wire mounted on the component side.
- indicates a lead wire mounted on the printed side.
- Through hole.
- Parts mounted on the conductor side.
- Pattern from the side which enables seeing.
- Pattern of the rear side.
- Circled numbers refer to waveforms.

Caution:
Pattern face side: Parts on the pattern face side seen from the (Conductor Side) pattern face are indicated.
Parts face side: Parts on the parts face side seen from the (Component Side) parts face are indicated.

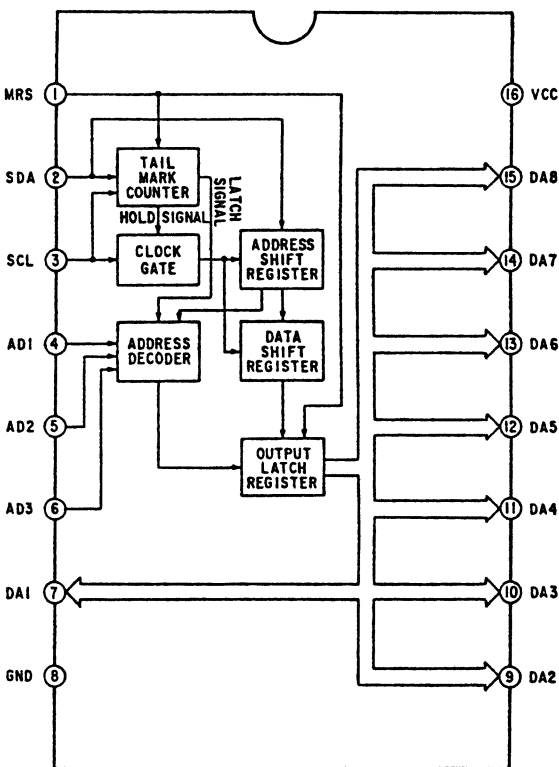
- For schematic diagram:
- Caution when replacing chip parts.
New parts must be attached after removal of chip.
Be careful not to heat the minus side of tantalum capacitor, because it is damaged by the heat.
- All resistors are in ohms, 1/4W (Chip resistors: 1/10W) unless otherwise noted.
kΩ: 1000Ω, MΩ: 1000kΩ.
- All capacitors are in μF unless otherwise noted. pF: μμF
50V or less are not indicated except for electrolytics and tantalums.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- nonflammable resistor.
- fusible resistor.
- panel designation.
- internal component.
- adjustment for repair.*
- B + Line.*
- B - Line.*
- IN/OUT direction of B line (+, -).
- Circled numbers refer to waveforms.*
- Voltages are dc between measurement point.*
- Readings are taken with a color-bar signal input.
- Readings are taken with a digital multimeter (DC10MΩ).
- Voltage are taken with a VOM (Input impedance 10MΩ).
- Voltage variations may be noted due to normal production tolerances.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

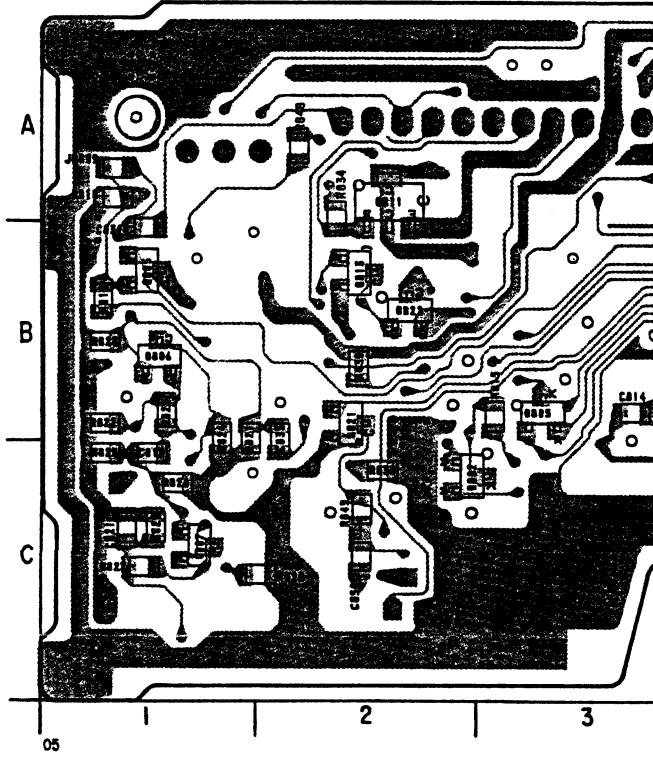
When indicating parts by reference number, please include the board name.

- * : Indicated by the color red.
In the diagrams, the model names are abbreviated as follows.
SLV-E7AE : AE
SLV-E7AP : AP
SLV-E7B : B
SLV-E7NC : NC
SLV-E7NP : NP
SLV-E7UB : UB
SLV-E8UV : UV
SLV-ER7UY : UY
SLV-E7VP : VP

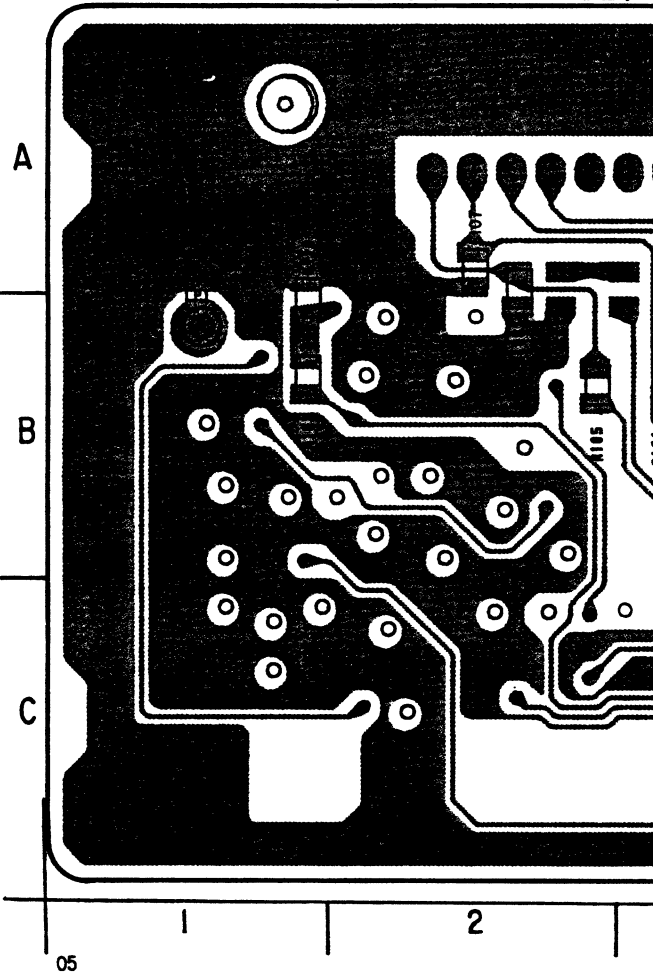
IC Block Diagrams
IC803 HD4978FP



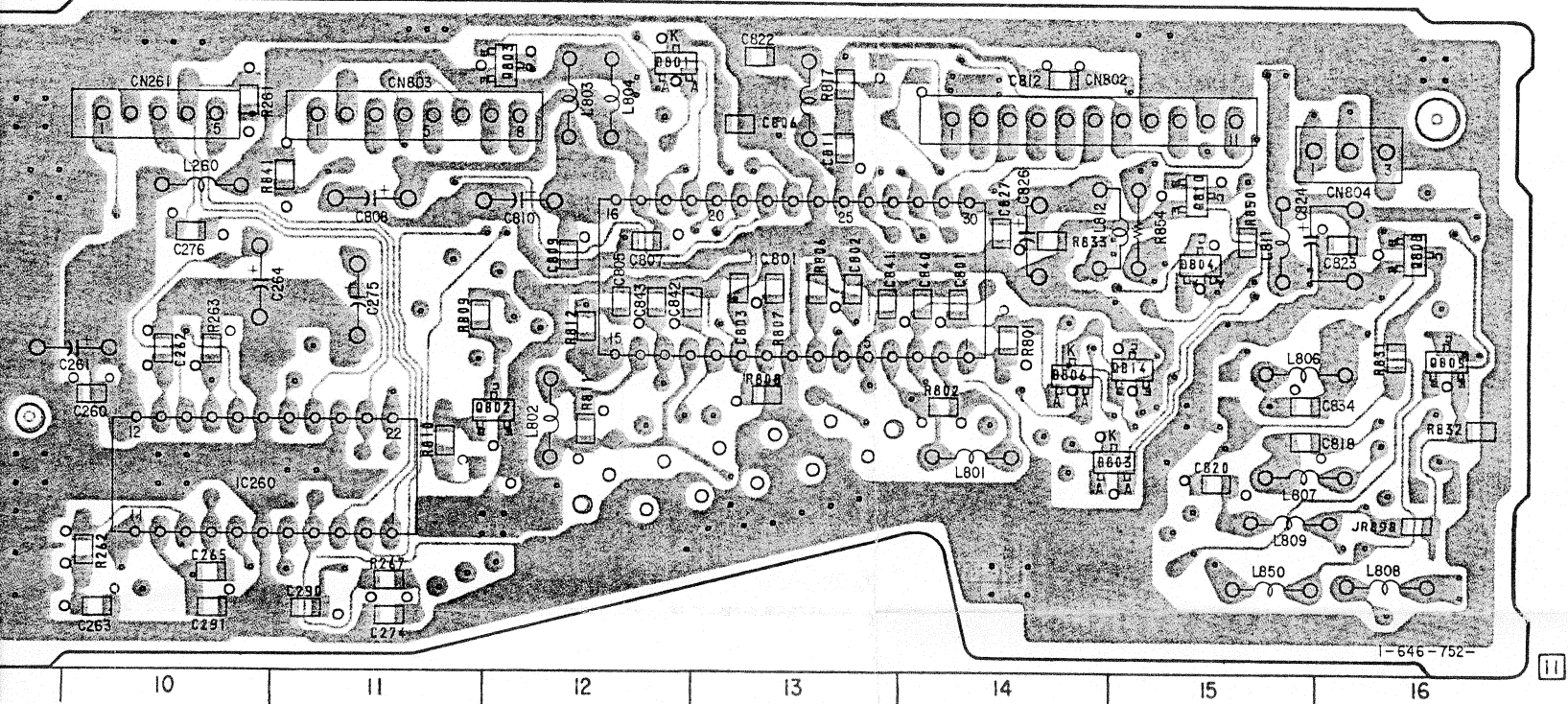
RP-163 BOARD (COMPONENT SIDE)



GR-10 BOARD (COMPONENT SIDE)



RP-163 BOARD (CONDUCTOR SIDE)



RP-163 BOARD

D801	A-12
D802	C-2
D803	C-15
D804	B-15
D805	B-3
D806	B-14
IC260	C-10
IC803	B-13
Q802	B-12
Q803	A-12
Q804	A-4
Q805	B-1
Q806	B-1
Q807	C-1
Q808	B-16
Q809	B-16
Q810	A-15
Q811	A-2
Q813	B-2
Q814	B-15
Q815	B-6
Q816	B-6
Q817	B-5
Q818	B-6
Q821	B-2
Q822	B-2

< DIODE >

D801	8-719-400-18	MA152WK
D802	8-719-400-18	MA152WK
D803	8-719-400-18	MA152WK
D804	8-719-400-18	MA152WK
D805	8-719-400-18	MA152WK
D806	8-719-400-18	MA152WK

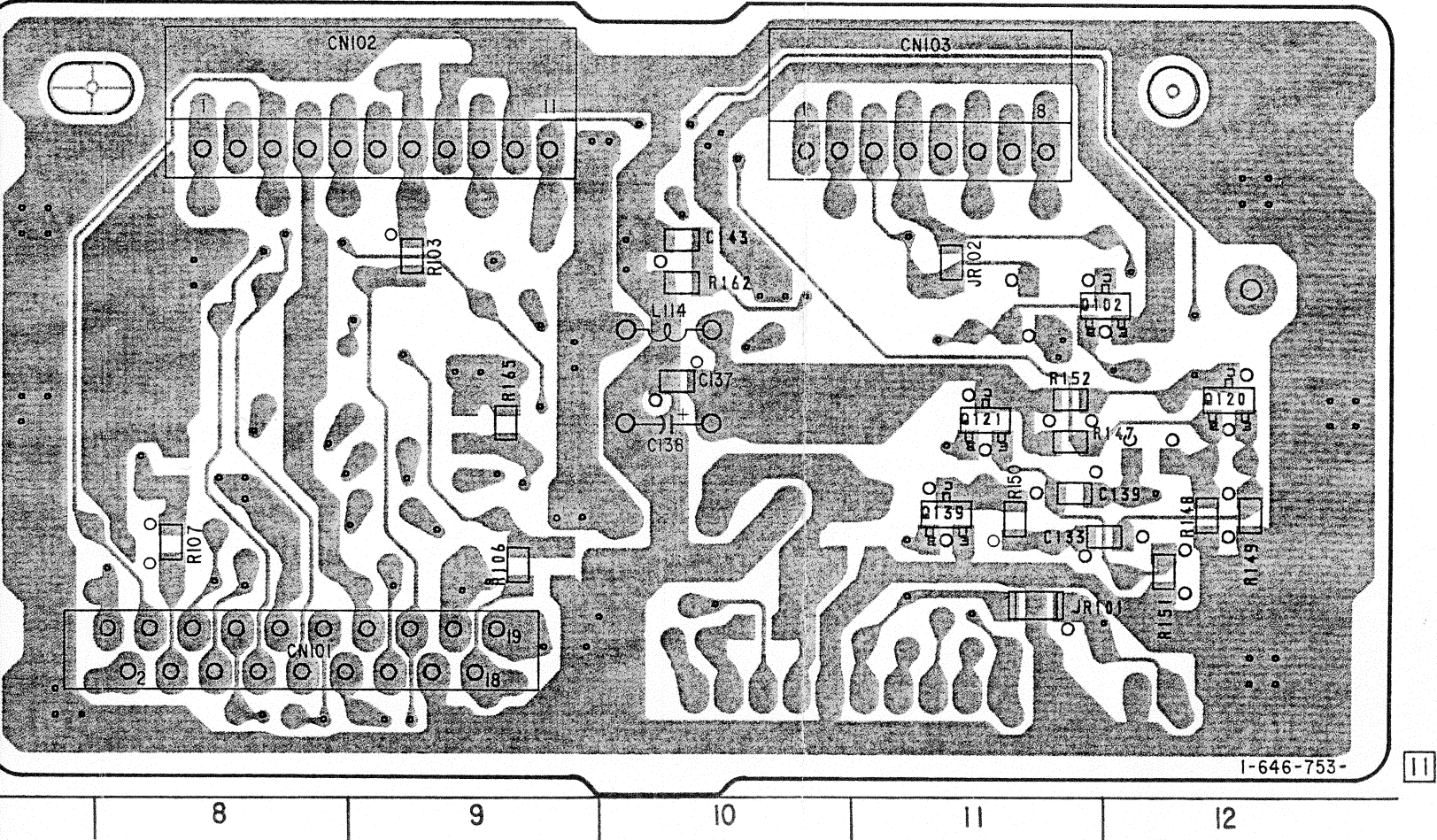
< TRANSISTOR >

Q802	8-729-422-27	2SD601A-Q	Q813	8-729-421-19	UN2213
Q803	8-729-901-06	DTA144EK	Q814	8-729-421-19	UN2213
Q804	8-729-422-27	2SD601A-Q	Q815	8-729-216-22	2SA1162
Q805	8-729-422-37	2SB709A-R	Q816	8-729-422-27	2SD601A-Q
Q806	8-729-422-37	2SB709A-R	Q817	8-729-216-22	2SA1162
Q807	8-729-422-27	2SD601A-Q	Q818	8-729-216-22	2SA1162
Q808	8-729-421-19	UN2213	Q821	8-729-421-19	UN2213
Q809	8-729-422-27	2SD601A-Q	Q822	8-729-421-19	UN2213
Q810	8-729-421-19	UN2213			
Q811	8-729-301-98	2SB1000A-L			

< IC >

IC260	8-759-055-49	AN3327K
IC801	8-759-046-75	HA118162NT

GR-10 BOARD (CONDUCTOR SIDE)



GR-10 BOARD

IC103	B-4
Q102	B-11
Q120	B-12
Q121	B-11
Q126	A-3
Q127	A-3
Q139	B-11

< IC >

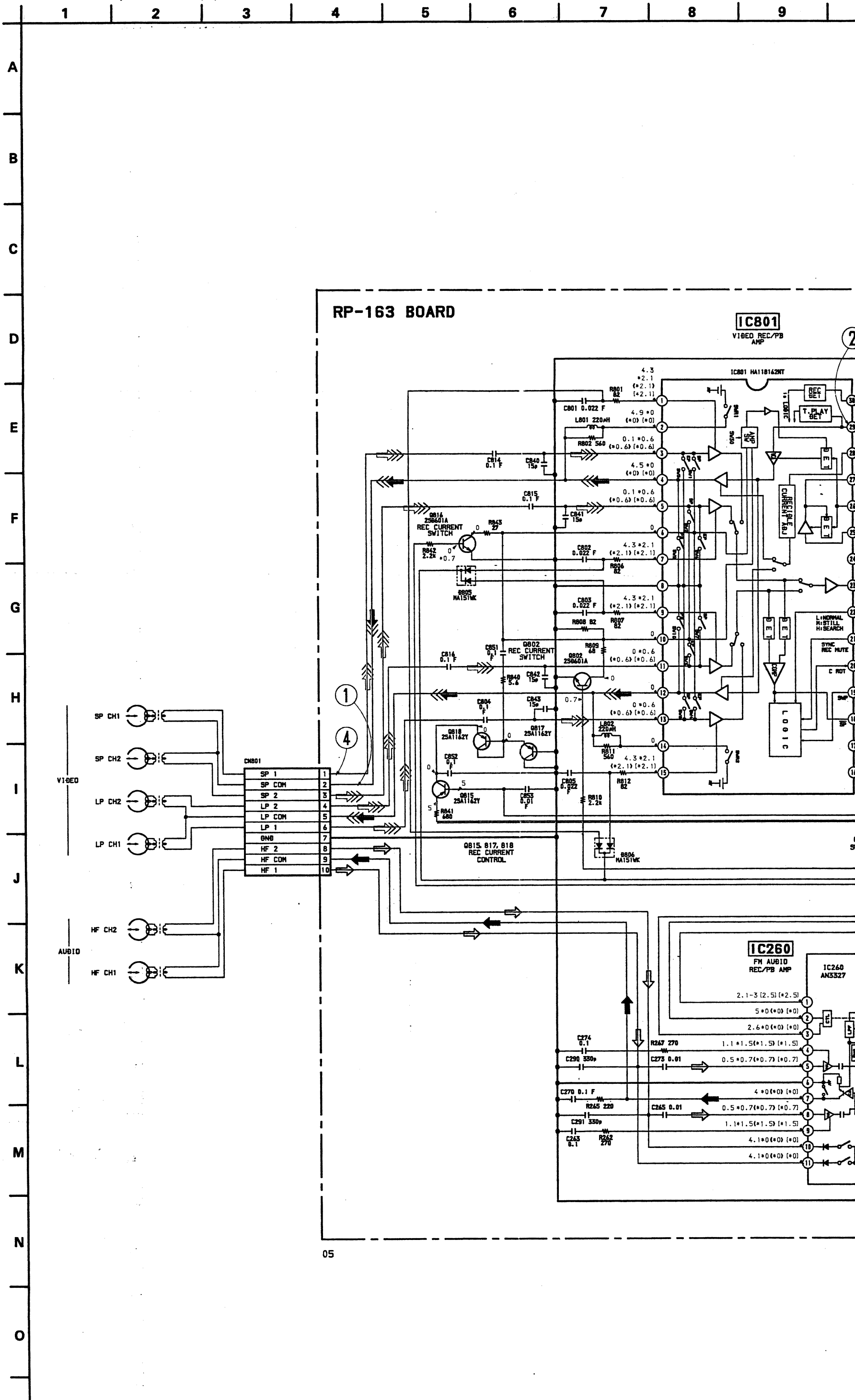
IC103	8-759-097-80	HD49783FP-T1
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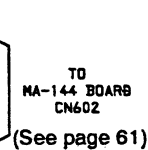
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Q102	8-729-424-18	UN2113
Q120	8-729-422-27	2SD601A-Q
Q121	8-729-422-27	2SD601A-Q
Q126	8-729-424-18	UN2113
Q127	8-729-421-19	UN2213
Q139	8-729-421-19	UN2213

RP-163 (HEAD AMP), GR-10 (RELAY) SCHEMATIC DIAGRAM

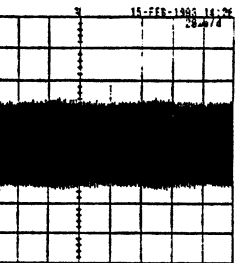
— Ref. No.: RP-163, GR-10 Boards; 1,000 series —



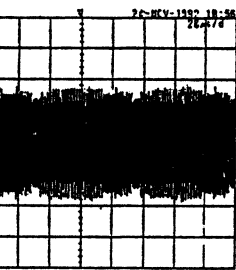


BOARD

01 ④ 1 V/DIV 20 μs/DIV

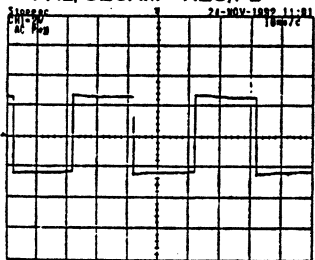


② 100 mV/DIV 20 μs/DIV



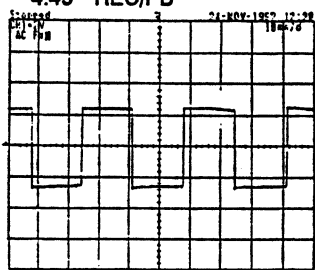
③ CN803 ③ 2 V/DIV 10 ms/DIV

PAL SECAM REC/PB



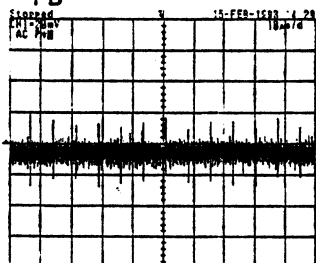
④ CN803 ③ 2 V/DIV 10 ms/DIV

4.43 REC/PB



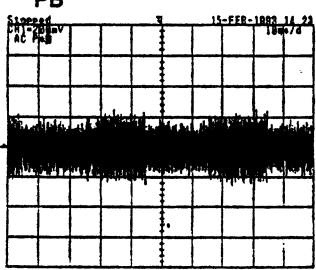
④ CN801 ③ 20 mV/DIV 10 μs/DIV

PB



⑤ CN803 ② 200 mV/DIV 10ms/DIV

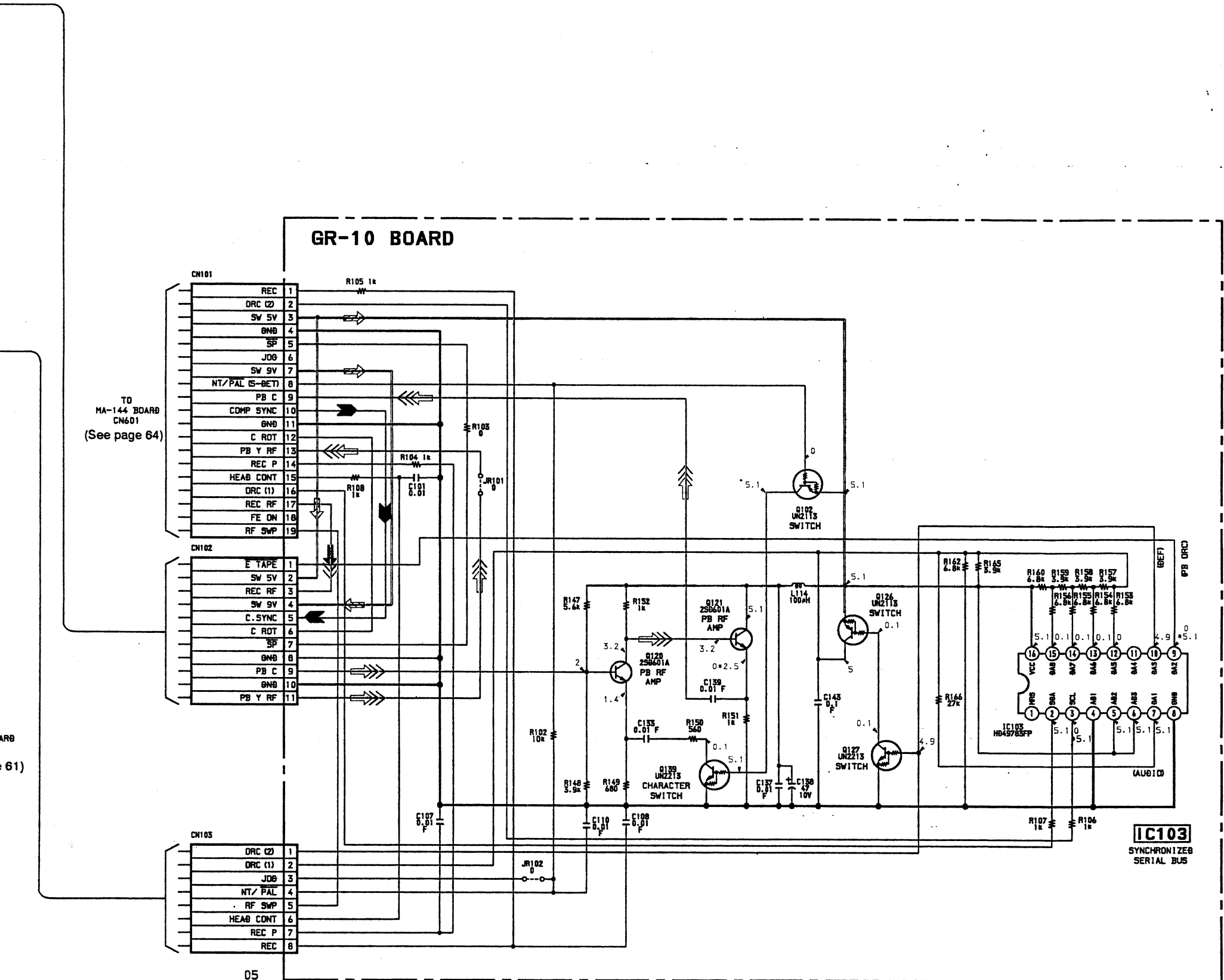
PB

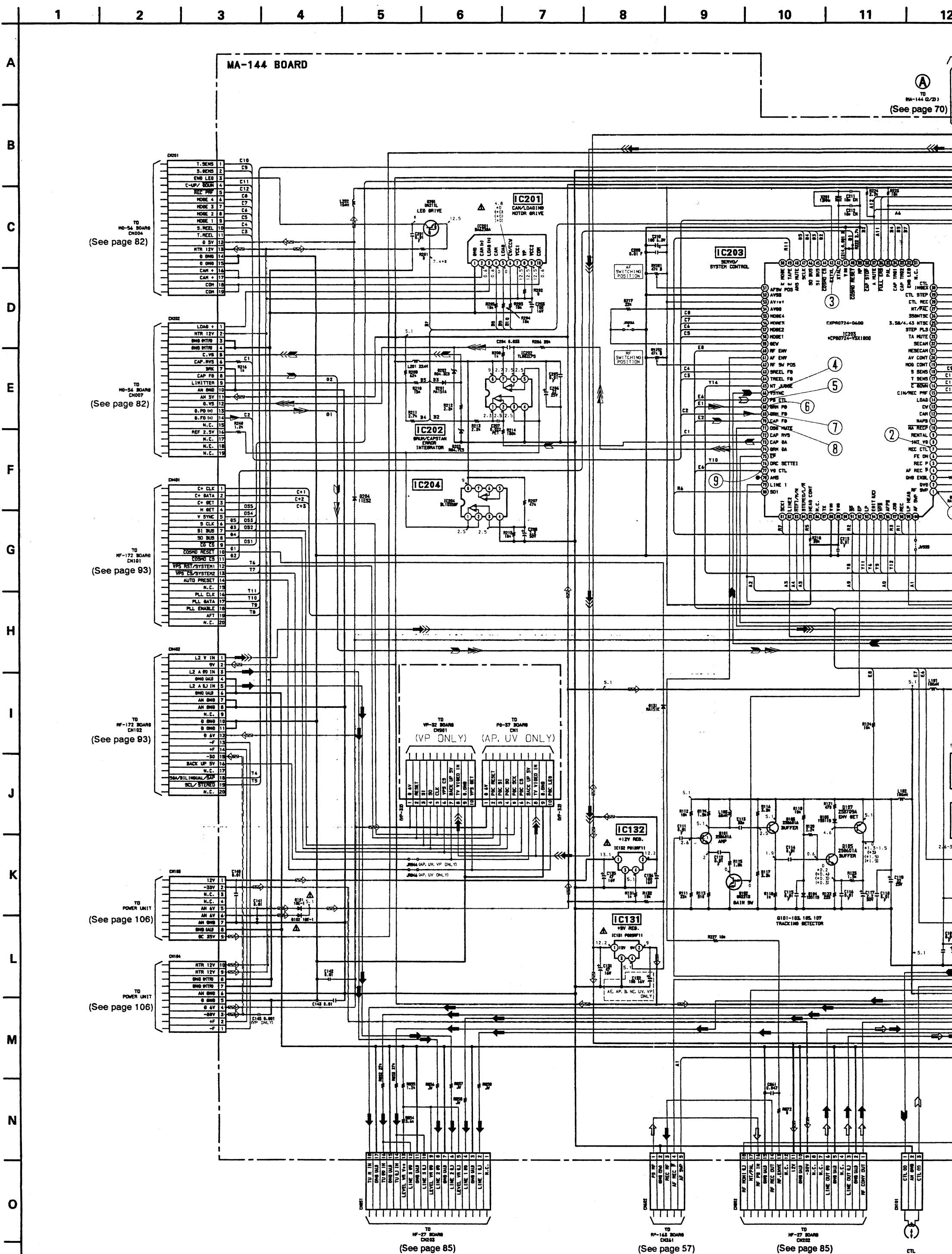


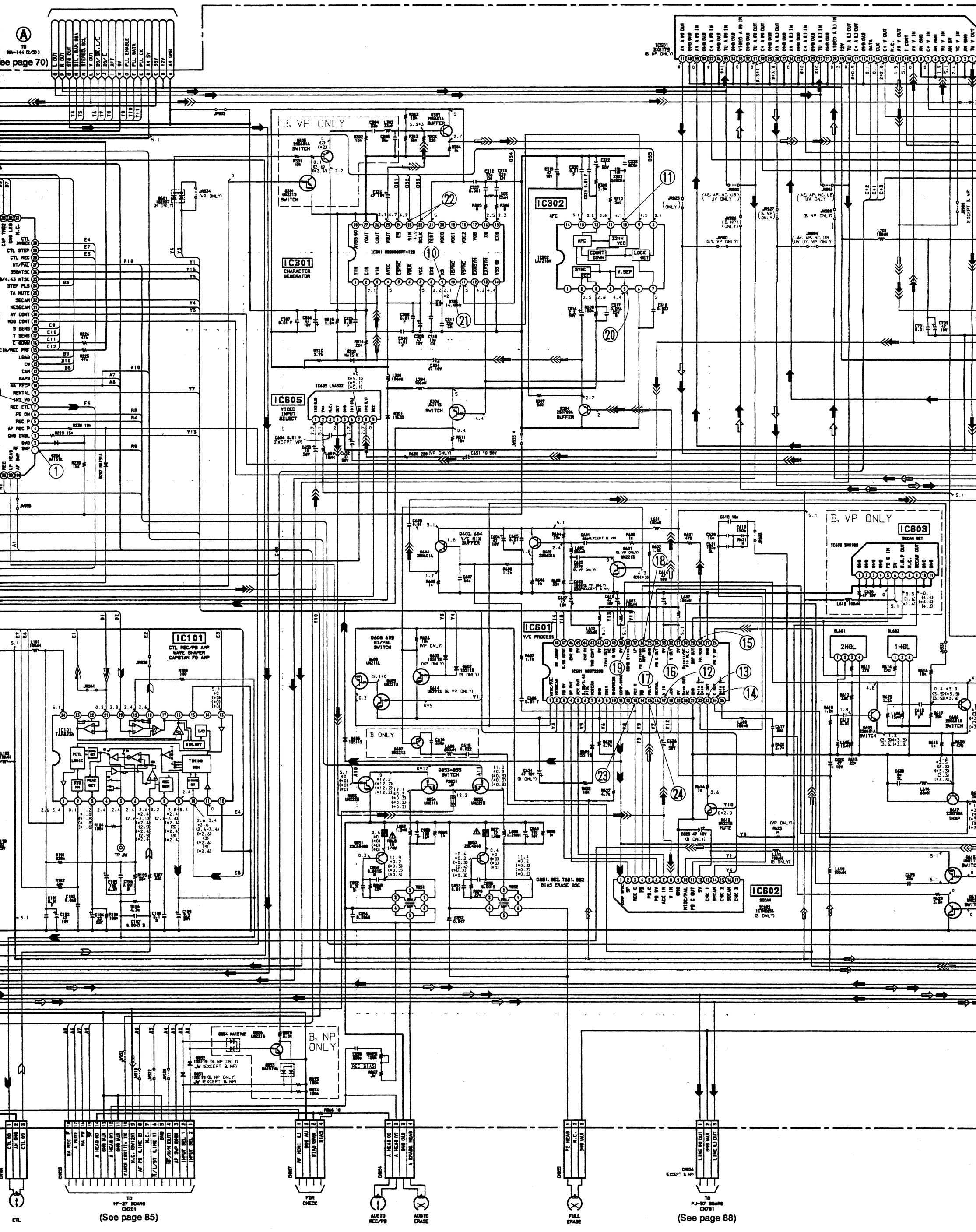
- No mark : COMMON (PAL REC)
- * : PAL PB
- { } : SECAM REC
- {* } : SECAM PB
- [] : NTSC4.43 REC
- [*] : NTSC4.43 PB
- # : Impossible to measure the voltage at the marked points.

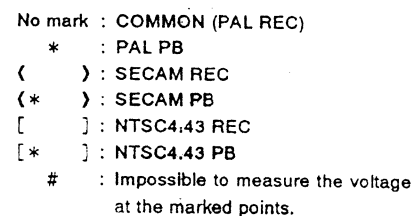
• Signal path

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC	➡	➡➡	➡➡➡	➡
PB	➡	➡➡	➡➡➡	➡



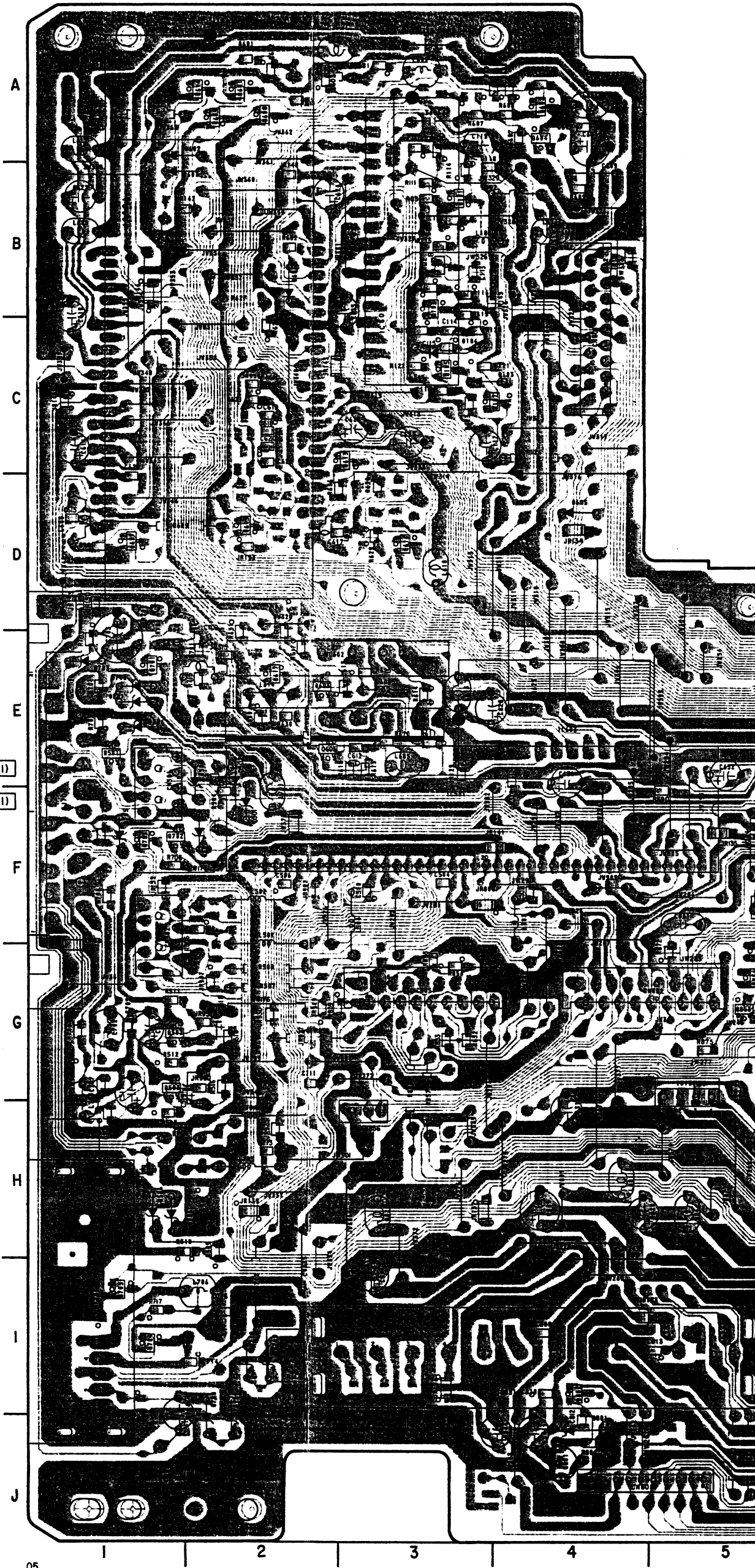






Signal path	REC	REC/PB	PB
Drum speed servo.		▶	
Drum phase servo		▶▶	
Drum servo (speed and phase)		▶▶▶	
Capstan speed servo		▶	
Capstan phase servo	▶▶	▶▶	▶▶▶
Capstan servo (speed and phase)		▶▶▶	
Ref. signal	▶▶		▶▶

MA-144 BOARD



MA-144 BOARD

< DIODE >

D101 G-7
D102 G-7
D103 C-3
D104 C-3
D131 H-13
D201 F-10
D202 E-8
D203 E-10
D204 D-11
D206 G-9
D207 F-10
D301 H-11
D302 I-9
D501 F-2
D502 E-2
D503 F-2
D505 E-2
D506 H-1
D601 I-9
D602 A-1
D603 B-1
D604 B-2
D605 D-4
D701 E-1
D702 E-1
D703 E-1
D704 E-1
D705 F-1
D706 H-1
D707 I-2
D708 I-2
D709 I-2
D710 I-2
D801 J-4
D802 I-4
D851 F-6
D852 G-5
D853 G-5
D854 G-5

D131 8-719-801-48 1SS193
D201 8-719-108-24 1SS223
D206 8-719-801-48 1SS193
D207 8-719-108-24 1SS223
D302 8-719-801-48 1SS193

D601 8-719-400-18 MA152WK (E7:B)
D802 8-719-800-76 1SS226 (E7:B)
D853 8-719-104-34 1S2836 (E7:B, NP)
D854 8-719-400-18 MA152WK (E7:B, NP)

< IC >

IC202 8-759-908-17 TL082CPS
IC203 8-752-836-58 CXP80724-061Q
IC204 8-759-970-89 BA10358F
IC301 8-759-089-79 MB90085PF-129
IC302 8-759-164-09 LA7218M-DE-R

< TRANSISTOR >

Q101 8-729-422-27 2SD601A-Q
Q102 8-729-421-19 UN2213
Q103 8-729-422-27 2SD601A-Q
Q105 8-729-422-27 2SD601A-Q
Q107 8-729-216-22 2SA1162

Q201 8-729-424-56 UN211L
Q301 8-729-421-19 UN2213 (E7:B, VP)
Q303 8-729-422-27 2SD601A-Q
Q304 8-729-216-22 2SA1162
Q305 8-729-422-27 2SD601A-Q (E7:B, VP)

Q306 8-729-424-18 UN2113
Q501 8-729-216-22 2SA1162 (E7:B, NP)
Q502 8-729-422-27 2SD601A-Q (E7:B, NP)
Q503 8-729-422-27 2SD601A-Q (E7:B, NP)
Q601 8-729-421-19 UN2213 (E7:B, VP)

Q602 8-729-422-27 2SD601A-Q
Q604 8-729-422-27 2SD601A-Q
Q605 8-729-422-27 2SD601A-Q
Q606 8-729-422-27 2SD601A-Q

Q607 8-729-421-19 UN2213 (E7:B)
Q608 8-729-424-56 UN211L
Q609 8-729-421-19 UN2213
Q613 8-729-421-19 UN2213
Q614 8-729-421-19 UN2213 (E7:B, VP)

Q615 8-729-424-18 UN2113
Q616 8-729-421-19 UN2213
Q617 8-729-216-22 2SA1162
Q701 8-729-216-22 2SA1162
Q702 8-729-424-56 UN211L

Q703 8-729-421-19 UN2213
Q704 8-729-216-22 2SA1162
Q705 8-729-421-19 UN2213
Q803 8-729-422-27 2SD601A-Q (E7:B)
Q853 8-729-421-19 UN2213

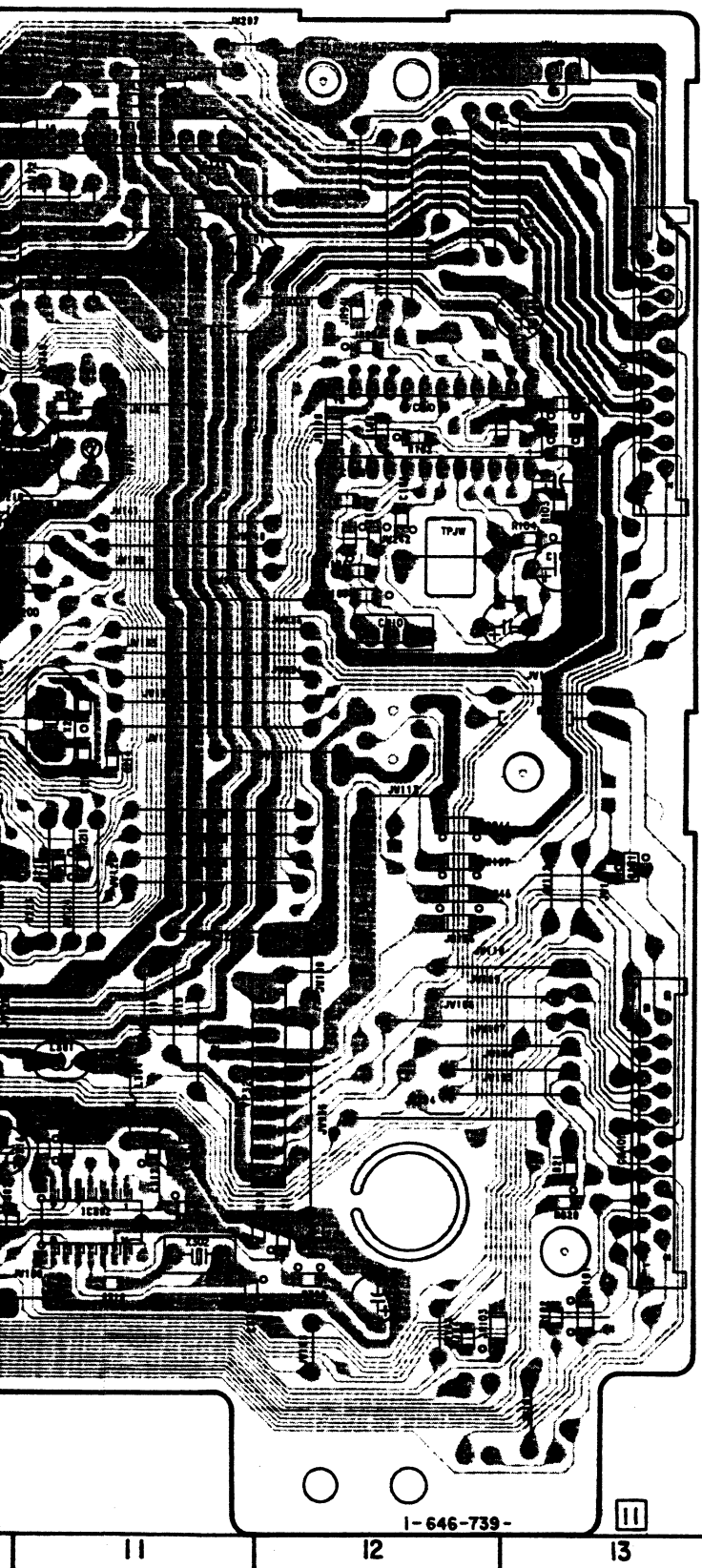
Q854 8-729-424-08 UN2111
Q855 8-729-424-18 UN2113
Q856 8-729-421-19 UN2213 (E7:B, NP)

EURO-AV (LINE I)
PERITEL (LINE I)

05

MA-144 BOARD





IC203 VOLTAGE VALUES

Pin No.	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰
Color system	REC	2.1-3	0	0	5.1	0	5	2.6-3.4	0	5.1	0	0	5.1	0	5.1	0	0
PAL	PB	2.1-3	0	0	0	0	0	2.6	0	0	5.1	0	0	0	5.1	0	0
SECAM	REC	2.1-3	0	0	5.1	0	5	2.6-3.4	0	5.1	0	0	5.1	0	5.1	0	0
NTSC	PB	2.1-3	0	0	0	0	0	2.6	0	0	5.1	0	0	0	5.1	0	0
4.43	REC	2.1-3	0	0	5.1	0	5	2.6-3.4	0	5.1	0	0	5.1	0	5.1	0	0
	PB	2.1-3	0	0	0	0	0	2.6	0	0	5.1	0	0	0	5.1	0	0

Pin No.	⑱	⑲	⑳	㉑	㉒	㉓	㉔	㉕	㉖	㉗	㉘	㉙	㉚	㉛	㉜	㉝	㉞
Color system	REC	0	5	5	0.5	0	0	0	0	0	5.1	0	0	7.3-7.9	0	0	0
PAL	PB	0	5	5	0.7	0	0	0	0	0	0	0	0	7.2-7.6	0.5	0.5	0
SECAM	REC	0	5	5.1	4	0.4	0	0	0	0	5.1	0	0	7.4-7.8	0.5	0.5	0
NTSC	PB	0	5	5	4	0	0	0	0	0	0	0	0	7.2-7.6	0.5	0.5	0
4.43	REC	0	5	5.1	0.6	0	0	0	0	0	5.1	0	0	7.5-8	0.5	0.5	0
	PB	0	5	5.1	0.7	0	0	0	0	0	0	0	0	7.1-6	0.5	0.5	0

Pin No.	㉟	㊱	㊲	㊳	㊴	㊵	㊶	㊷	㊸	㊹	㊺	㊻	㊼	㊽	㊾	㊿	1
Color system	REC	0	0	0.2	2.3	GND	5.1	0	2.4	2.4	5	4.7	2.1	3.2	5	2.2	2.2
PAL	PB	5.2	12.1	0.2	2.3	GND	5.1	0	2.4	2.4	5	3.6	1.4	3.8	0	2.2	2.2
SECAM	REC	5.1	0	0.2	2.3	GND	5.1	0	2.4	2.4	5	4.7	1.4	4.7	0	2.2	2.2
NTSC	PB	4.4	12.1	0.2	2.3	GND	5.1	0	2.4	2.4	5	4.7	1.4	4.9	0	2.2	2.2
4.43	REC	5.1	0	0.2	2.3	GND	5.1	0	2.4	2.4	5	4.7	1.4	4.7	0	2.2	2.2
	PB	5.2	12.1	0.2	2.3	GND	5.1	0	2.4	2.4	5	4.7	1.4	4.0	0	2.2	2.2

Pin No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Color system	REC	GND	5.2	5.2	0	5.2	0	5.2	0	0	0.8	2.5	#	#	0.2	0.4	2.6-3.4
PAL	PB	GND	5.2	5.2	0	5.2	0	5.2	0	3.7	3.9	2.5	#	#	0.2	0.4	2.6-3.4
SECAM	REC	GND	5.2	5.2	0	5.2	0	5.2	0	0	0.8	2.5	#	#	0.2	0.4	2.6-3.4
NTSC	PB	GND	5.2	5.2	0	5.2	0	5.2	0	3.1	3.1	2.5	#	#	0.2	0.4	2.6-3.4
4.43	REC	GND	5.2	5.2	0	5.2	0	5.2	0	0	0.8	2.5	#	#	0.2	0.4	2.6-3.4
	PB	GND	5.2	5.2	0	5.2	0	5.2	0	3.1	3.8	2.5	#	#	0.2	0.4	2.6-3.4

Pin No.	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Color system	REC	3.4	2.6	0	0	2.5	2.5	5.1	0	2.6-3.4	0	5	5.1	0	0	5.1	2.4
PAL	PB	3.4	2.6	0	0	2.5	2.5	5.1	0	2.6-3.4	0	5	5.1	0	0	5.1	0
SECAM	REC	3.4	2.6	0	0	2.5	2.5	5.1	0	2.6-3.4	5.1	5	5.1	0	0	5.1	2.4
NTSC	PB	3.4	2.6	0	0	2.5	2.5	5.1	0	2.6-3.4	5.1	5	5.1	0	0	5.1	0
4.43	REC	3.4	2.6	0	0	2.5	2.5	5.1	0	2.6-3.4	5.1	5	5.1	0	0	5.1	2.4
	PB	3.4	2.6	0	0	2.5	2.5	5.1	0	2.6-3.4	5.1	5	5.1	0	0	5.1	0

Pin No.	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Color system	REC			GND	5.2	0	0	0	0	5.1	0	0	5.1	0	2.1-3	2.1-3	2.1-3
PAL	PB			GND	5.2	0	0	0	0	0.1	5.1	0	0	0	2.1-3	2.1-3	2.1-3
SECAM	REC			GND	5.2	0	0	0	0	0.1	5.1	0	0	0	2.1-3	2.1-3	2.1-3
NTSC	PB			GND	5.2	0	0	0	0	0.1	5.1	0	0	0	2.1-3	2.1-3	2.1-3
4.43	REC			GND	5.2	0	0	0	0	5.1	0	0	5.1	0	2.1-3	2.1-3	2.1-3
	PB			GND	5.2	0	0	0	0	0.1	5.1	0	0	0	2.1-3	2.1-3	2.1-3

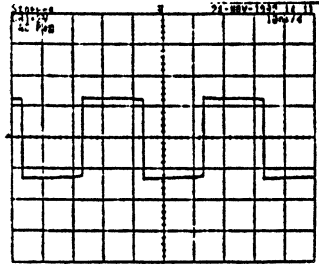
IC601 VOLTAGE VALUES

Pin No.	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰
Color system	REC	0.2	0.4	0	4.9	1.9	0	0	GND	0	2.6	0.5	0	1.3	5.1	0	0
PAL	PB	5	0.1	4.8	4.9	1.9	0	4.1	GND	0	2.6	0.5	0	1.3	0.1	0	0
SECAM	REC	0.2	0.5	0	4.9	3	0	0	GND	0	2.6	0.5	0	1.3	5.1	0	0
NTSC	PB	5	0	4.8	4.9	1.9	0	4.1	GND	0	2.6	0.5	0	1.3	0.1	0	0
4.43	REC	0.2	0.1	0	4.9	1.9	0	0	GND	0	2.6	0.5	0	1.3	5.1	0	0
	PB	0.2	0	4.8	4.9	1.9	0	4.1	GND	0	2.6	0.5	0	1.3	0.1	0	0

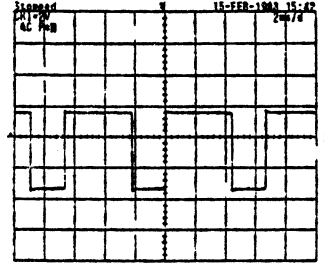
Pin No.	⑱	⑲	⑳	㉑	㉒	㉓	㉔	㉕	㉖	㉗	㉘	㉙	㉚	㉛	㉜	㉝	㉞
Color system	REC	0	8.9		GND	2.4	3.6	1.8-2.6	1.8	0	GND	3	0.5	2.2	4.9	2	4.9
PAL	PB	0	8.9		GND	2.1	3.3	2.1	2.7	0	GND	3.5	0.5	2.2	4.9	2	4.9
SECAM	REC	0	8.9		GND	2.4	3.6	1.8-2.6	1.8	0	GND	3	0.5	2.2	4.9	2	4.9
NTSC	PB	0	8.9		GND	2.4	3.6	2.4	2.8	0	GND	3.6	0.5	2.2	4.9	2	4.9
4.43	REC	0	8.9		GND	2.4	3.6	1.8-2.6	1.8	0	GND	3	0.5	2.2	4.9	2	4.9
	PB	0	8.9		GND	2	3.1	1.8-2.6	2.8	0	GND	3.6	0.5	2.2	4.9	2	4.9

Pin No.	㉟	㊱	㊲	㊳	㊴	㊵	㊶	㊷	㊸	㊹	㊺	㊻	㊼	㊽	㊾	㊿	1
Color system	REC	GND	1.9	0	0	4.8	0	5									
PAL	PB	GND	1.9	0	0	4.8	0	5									
SECAM	REC	GND	1.9	0	0	4.8	0	5									
NTSC	PB	GND	1.9	0	0	4.8	0	5									
4.43	REC	GND	2	0	0	4.8	0	5									
	PB	GND	2	0	0	4.8	0	5									

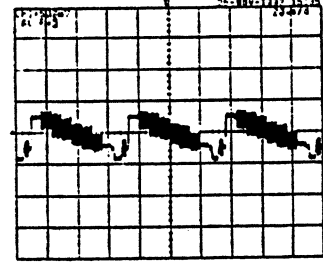
① IC203 ① 2 V/DIV 10 ms/DIV
REC/PB



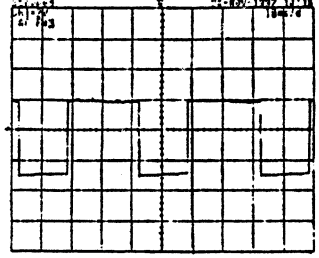
② IC203 ② 2 V/DIV 1 ms/DIV
REC/PB



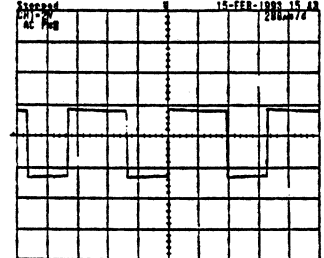
③ IC601 ① 500 mV/DIV 20 μs/DIV
4.43 REC



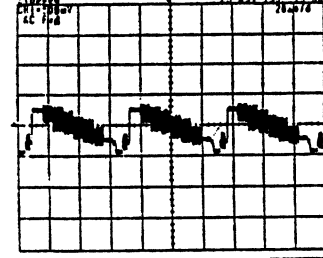
④ IC203 ③ 2 V/DIV 10 ms/DIV
REC/PB



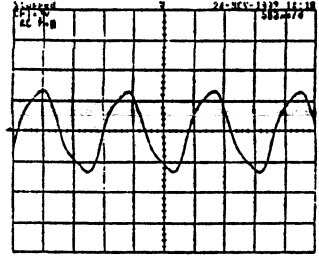
⑤ IC203 ④ 2 V/DIV 200 μs/DIV
REC/PB



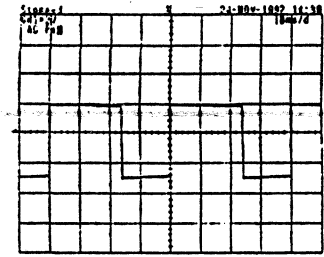
⑥ IC601 ② 500 mV/DIV 20 μs/DIV
4.43 PB



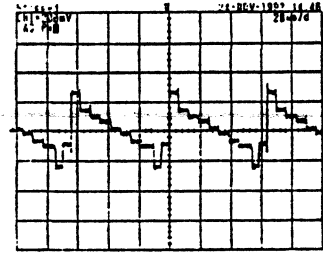
⑦ IC203 ⑤ 2 V/DIV 500 μs/DIV
REC/PB



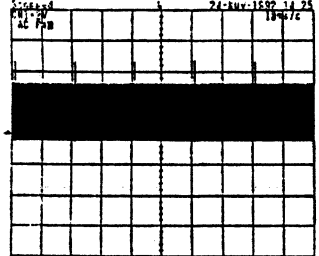
⑧ IC203 ⑥ 2 V/DIV 10 ms/DIV
REC/PB



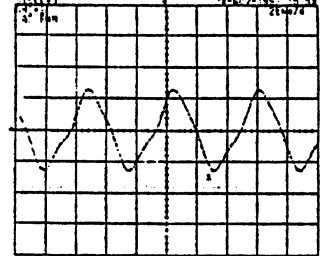
⑨ IC601 ③ 200 mV/DIV 20 μs/DIV
PAL REC/PB, SECAM REC



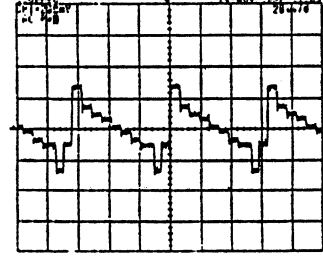
⑩ IC203 ⑥ 2 V/DIV 10 ms/DIV
PAL, SECAM REC/PB



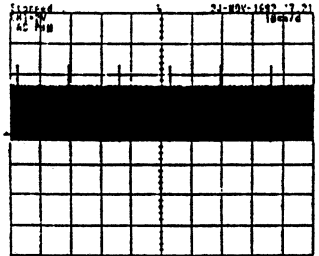
⑪ IC301 ③ 2 V/DIV 20 ns/DIV



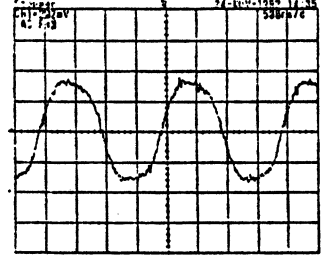
⑫ IC601 ④ 200 mV/DIV 20 μs/DIV
SECAM PB



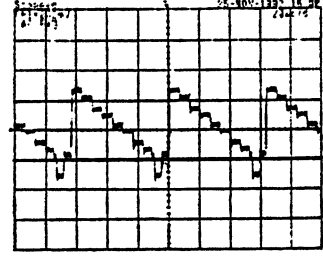
⑬ IC203 ⑥ 2 V/DIV 10 ms/DIV
4.43 REC/PB



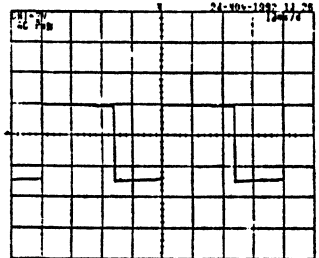
⑭ IC302 ⑩ 200 mV/DIV 500 ns/DIV
REC/PB



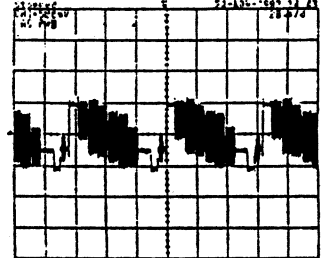
⑮ IC601 ⑤ 200 mV/DIV 20 μs/DIV
4.43 PB



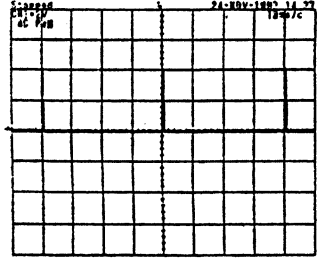
⑯ IC203 ⑦ 2 V/DIV 10 ms/DIV
REC/PB



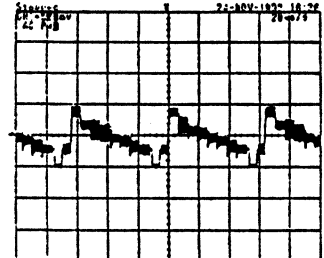
⑰ IC601 ⑥ 500 mV/DIV 20 μs/DIV
PAL REC/PB



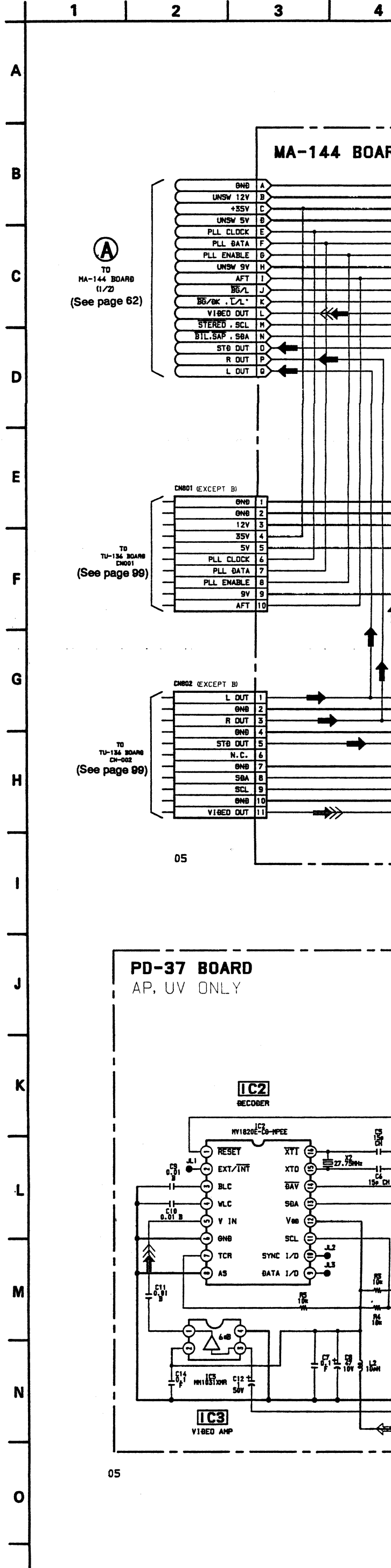
⑱ IC203 ⑧ 2 V/DIV 10 ms/DIV
REC/PB



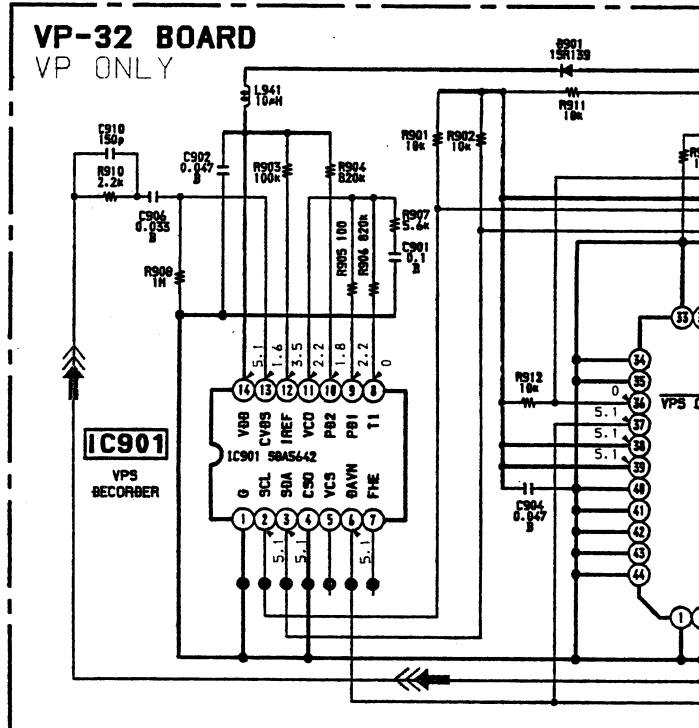
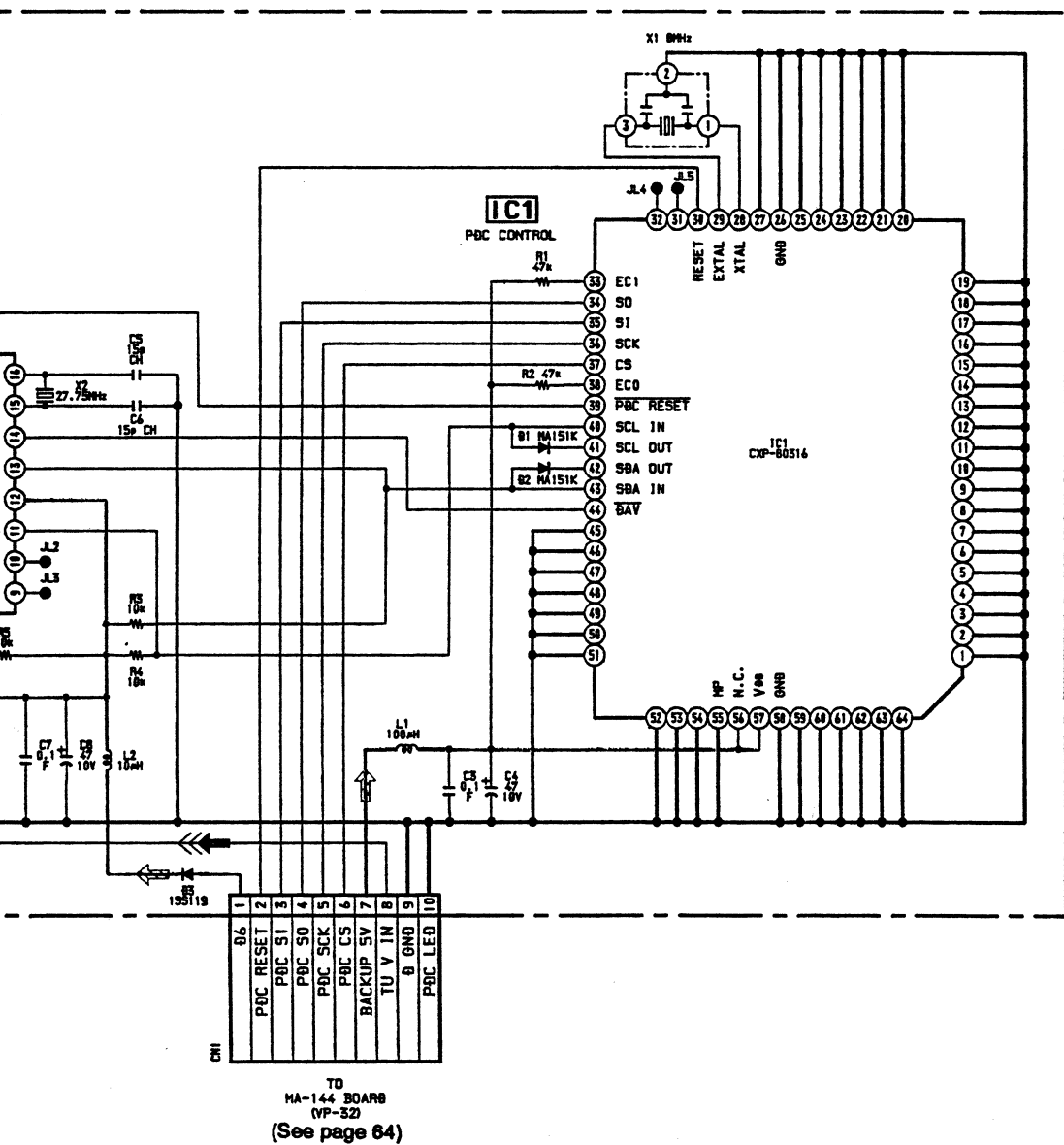
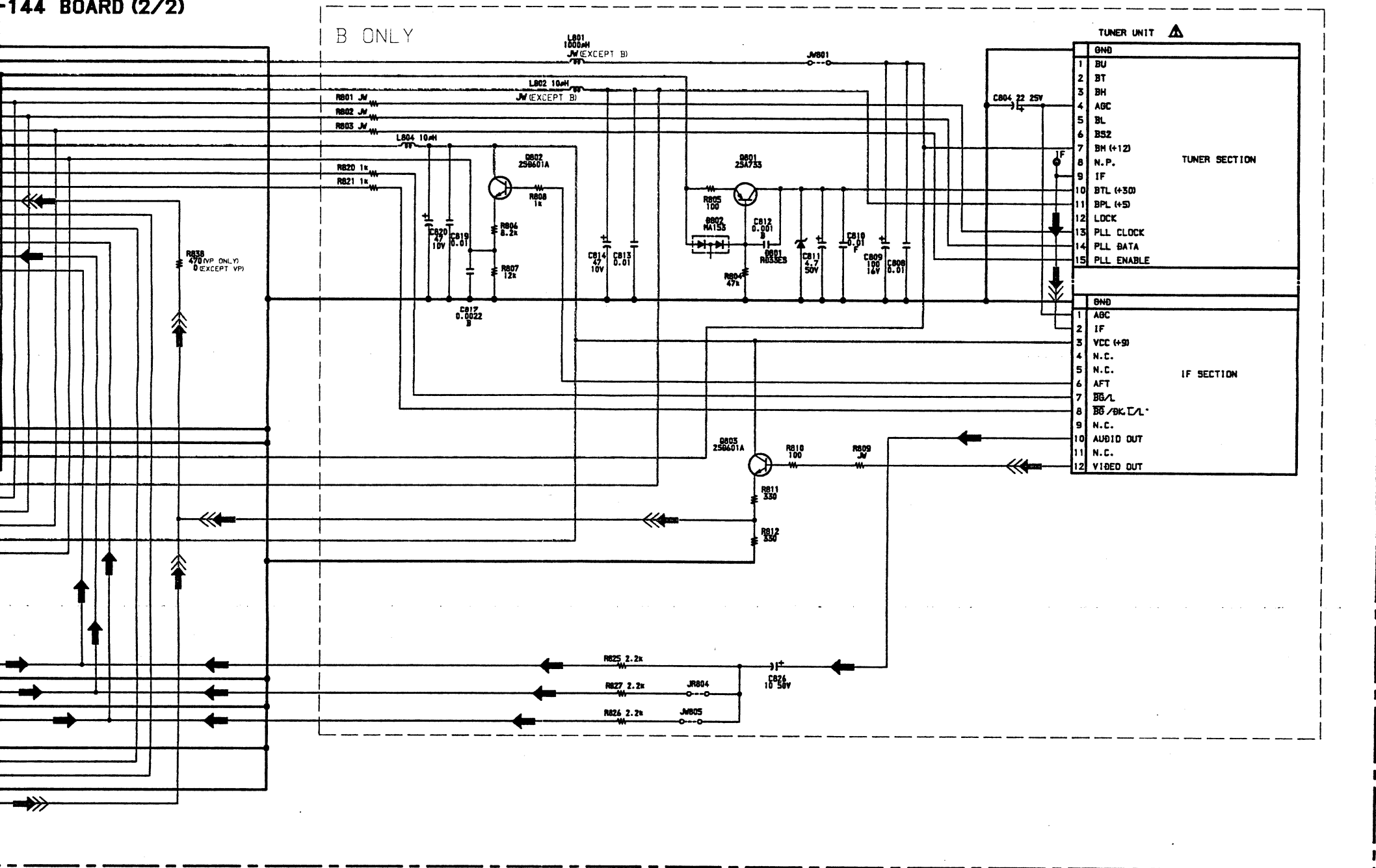
⑲ IC601 ⑦ 500 mV/DIV 20 μs/DIV
SECAM REC/PB

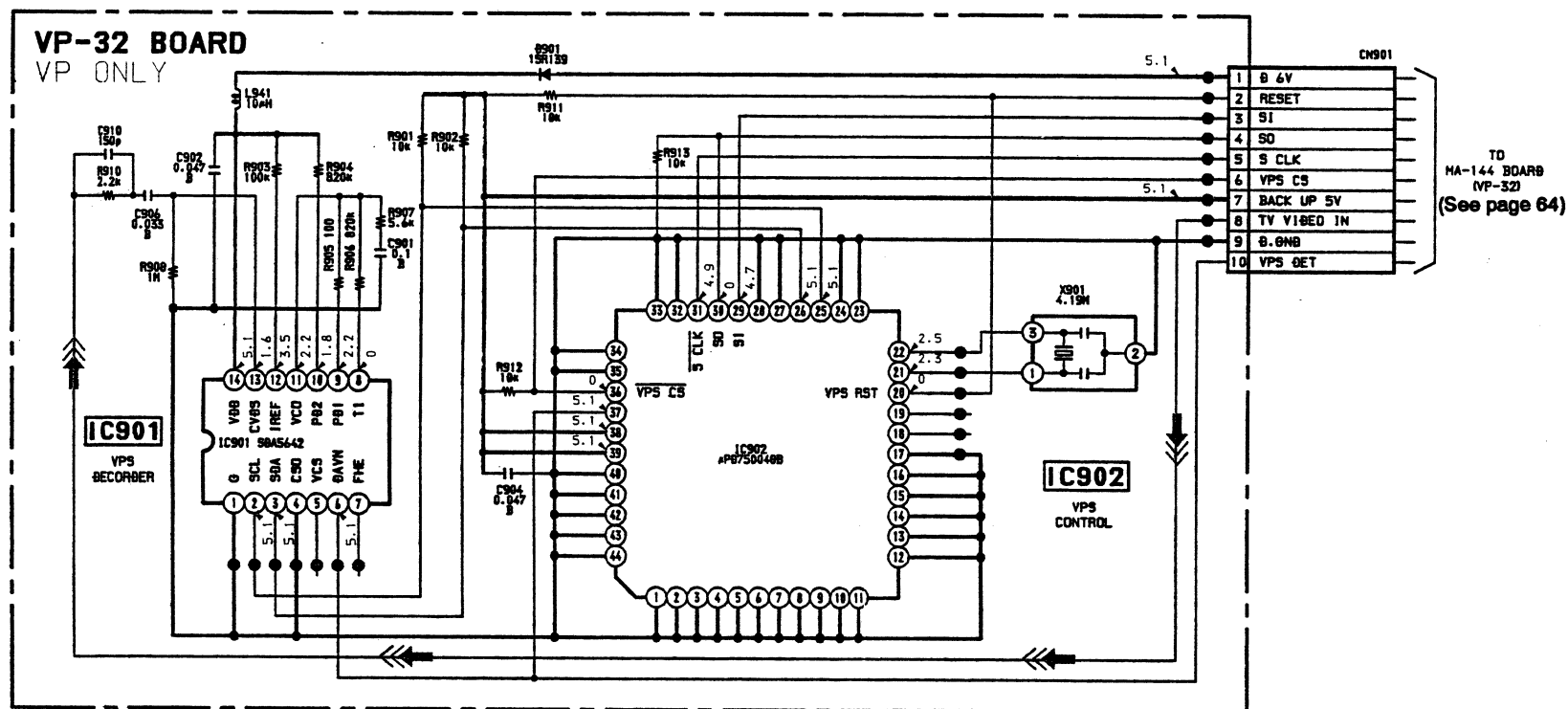
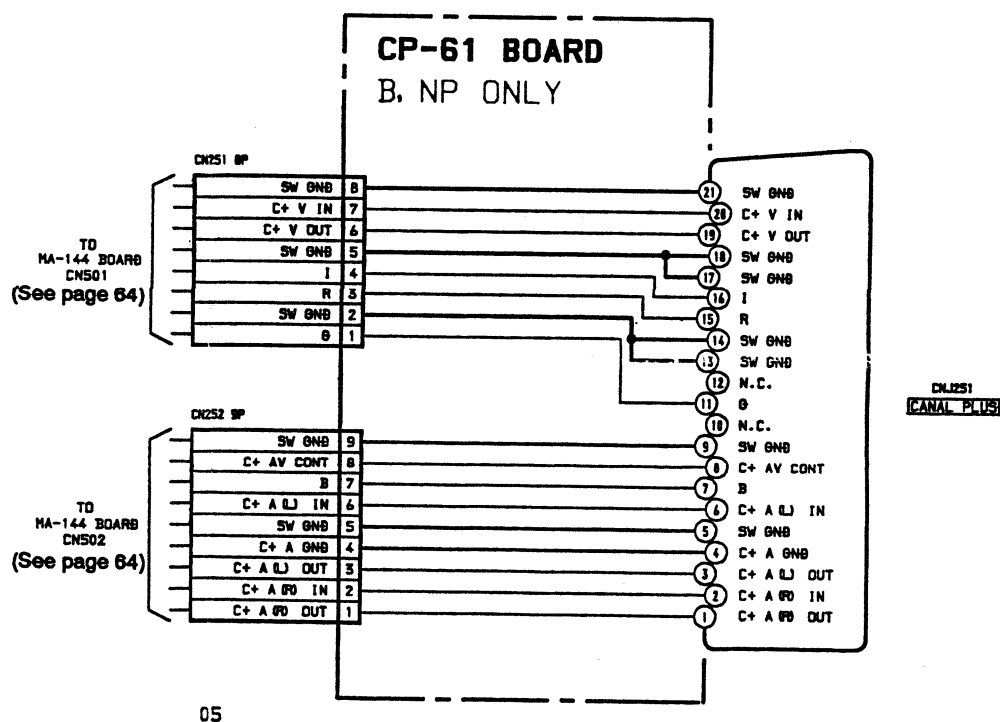
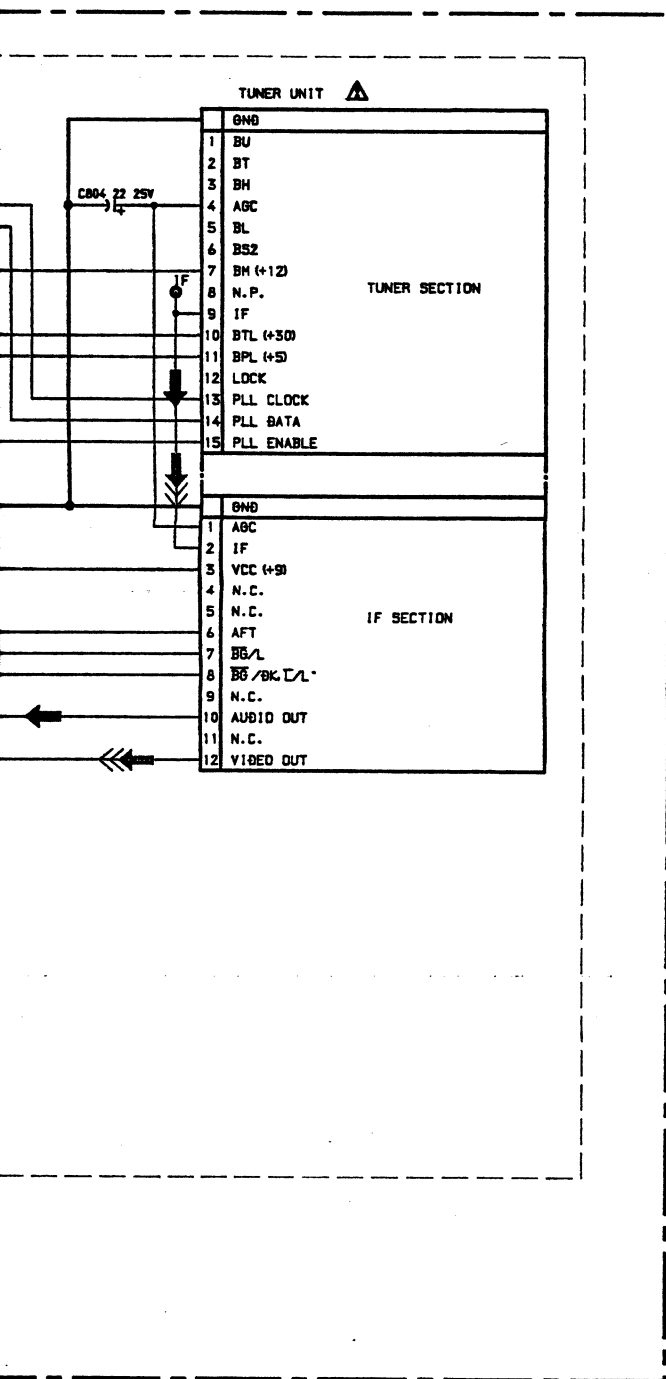


Continued on page 77.



MA-144 BOARD (2/2)





MA-144 BOARD

MA-144 BOARD

D101 G-7
 D102 G-7
 D103 C-3
 D104 C-3
 D131 H-13
 D201 F-10
 D202 E-8
 D203 E-10
 D204 D-11
 D206 G-9
 D207 F-10
 D301 H-11
 D302 I-9
 D501 F-2
 D502 E-2
 D503 F-2
 D505 E-2
 D506 H-1
 D601 I-9
 D602 A-1
 D603 B-1
 D604 B-2
 D605 D-4
 D701 E-1
 D702 E-1
 D703 E-1
 D704 E-1
 D705 F-1
 D706 H-1
 D707 I-2
 D708 I-2
 D709 I-2
 D710 I-2
 D801 J-4
 D802 I-4
 D851 F-6
 D852 G-5
 D853 G-5
 D854 G-5
 IC101 F-12
 IC131 G-5
 IC132 F-6
 IC201 E-9
 IC202 E-10
 IC203 G-10
 IC204 E-9
 IC301 I-9
 IC302 I-11
 IC501 F-3
 IC601 A-1
 IC602 B-3
 IC603 E-4
 IC605 E-6
 O101 B-3
 O102 B-3
 O103 B-3
 O105 C-3
 O107 C-3
 O201 E-9
 O301 I-8
 O303 I-9
 O304 I-10
 O305 I-9
 O306 I-10
 O501 E-1
 O502 G-1
 O503 G-1
 O601 A-2
 O602 A-4
 O603 A-3
 O604 A-4
 O605 E-2
 O606 E-2
 O607 D-1
 O608 A-2
 O609 A-2
 O613 C-3
 O614 A-2
 O615 D-2
 O616 D-3
 O617 E-2
 O701 E-1
 O702 F-1
 O703 F-1
 O704 I-1
 O705 I-1
 O801 J-4
 O803 I-8
 O851 H-6
 O852 H-7
 O853 H-7
 O854 H-7
 O855 H-7
 O856 G-5

< DIODE >

D131 8-719-801-48 1SS193
 D201 8-719-108-24 1SS223
 D206 8-719-801-48 1SS193
 D207 8-719-108-24 1SS223
 D302 8-719-801-48 1SS193
 D601 8-719-400-18 MA152WK (E7:B)
 D802 8-719-800-76 1SS226 (E7:B)
 D853 8-719-104-34 1S2836 (E7:B, NP)
 D854 8-719-400-18 MA152WK (E7:B, NP)

< IC >

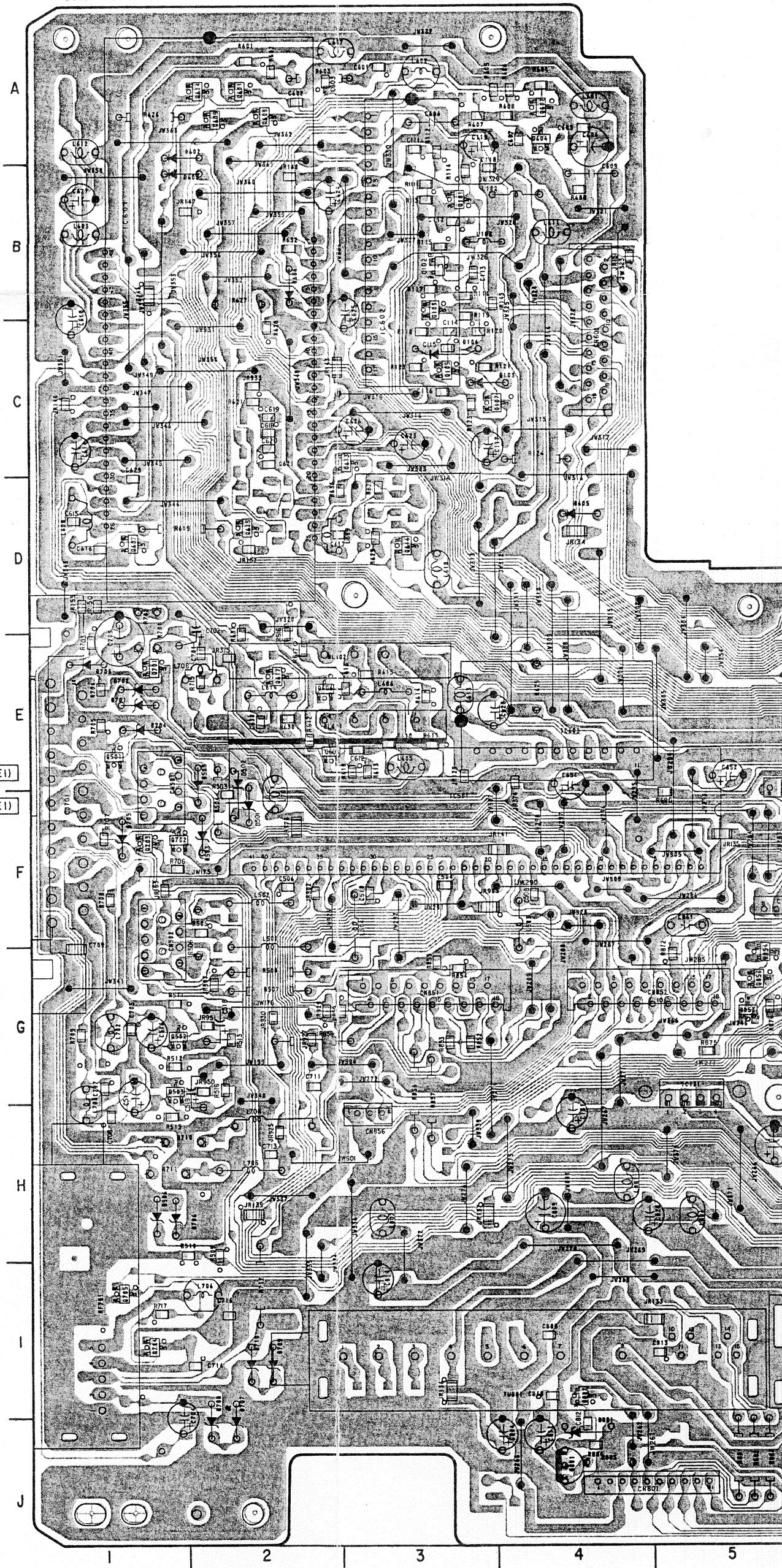
IC202 8-759-908-17 TL082CPS
 IC203 8-752-836-58 CXP80724-061Q
 IC204 8-759-970-89 BA10358F
 IC301 8-759-089-79 MB90085PF-129
 IC302 8-759-164-09 LA7218M-DE-R

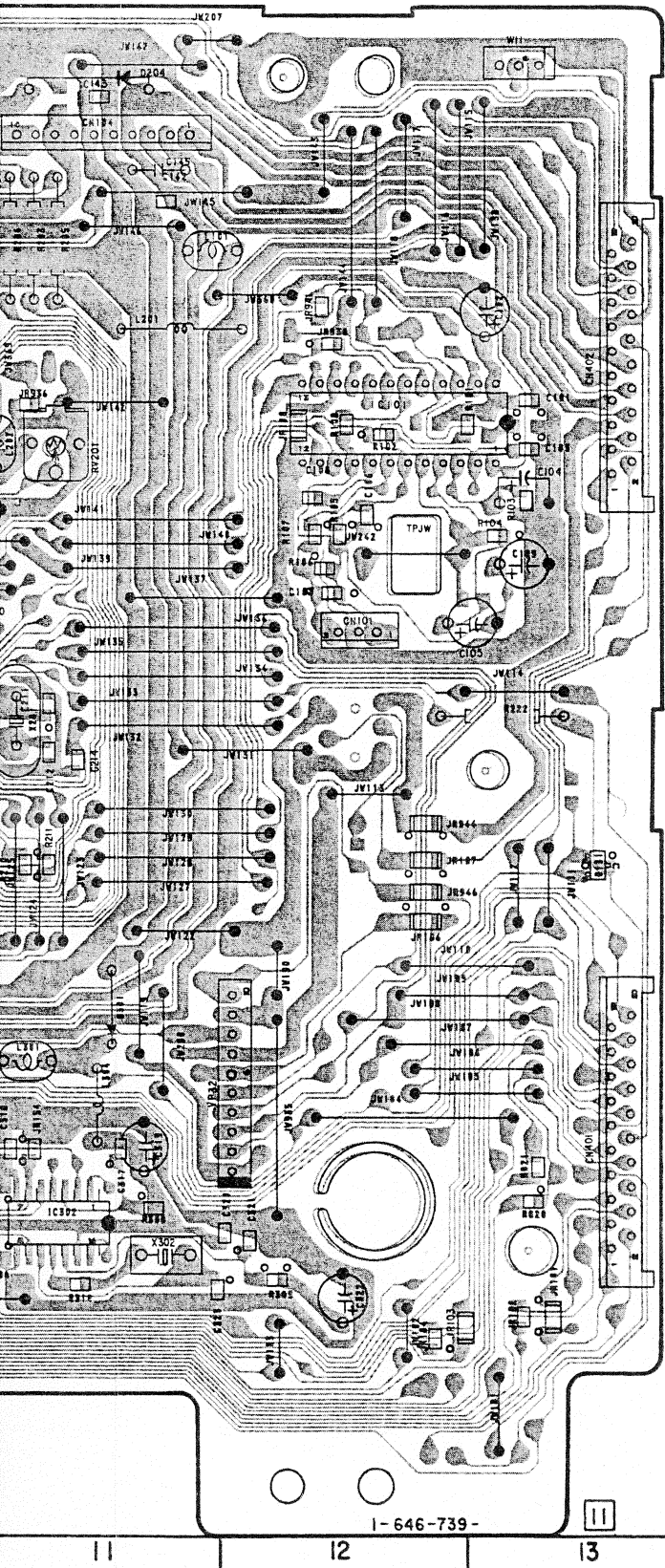
< TRANSISTOR >

Q101 8-729-422-27 2SD601A-Q
 Q102 8-729-421-19 UN2213
 Q103 8-729-422-27 2SD601A-Q
 Q105 8-729-422-27 2SD601A-Q
 Q107 8-729-216-22 2SA1162
 Q201 8-729-424-56 UN211L
 Q301 8-729-421-19 UN2213 (E7:B, VP)
 Q303 8-729-422-27 2SD601A-Q
 Q304 8-729-216-22 2SA1162
 Q305 8-729-422-27 2SD601A-Q (E7:B, VP)
 Q306 8-729-424-18 UN2113
 Q501 8-729-216-22 2SA1162 (E7:B, NP)
 Q502 8-729-422-27 2SD601A-Q (E7:B, NP)
 Q503 8-729-422-27 2SD601A-Q (E7:B, NP)
 Q601 8-729-421-19 UN2213 (E7:B, VP)
 Q602 8-729-422-27 2SD601A-Q
 Q604 8-729-422-27 2SD601A-Q
 Q605 8-729-422-27 2SD601A-Q
 Q606 8-729-422-27 2SD601A-Q
 Q607 8-729-421-19 UN2213 (E7:B)
 Q608 8-729-424-56 UN211L
 Q609 8-729-421-19 UN2213
 Q613 8-729-421-19 UN2213
 Q614 8-729-421-19 UN2213 (E7:B, VP)
 Q615 8-729-424-18 UN2113
 Q616 8-729-421-19 UN2213
 Q617 8-729-216-22 2SA1162
 Q701 8-729-216-22 2SA1162
 Q702 8-729-424-56 UN211L
 Q703 8-729-421-19 UN2213
 Q704 8-729-216-22 2SA1162
 Q705 8-729-421-19 UN2213
 Q803 8-729-422-27 2SD601A-Q (E7:B)
 Q853 8-729-421-19 UN2213
 Q854 8-729-424-08 UN2111
 Q855 8-729-424-18 UN2113
 Q856 8-729-421-19 UN2213 (E7:B, NP)

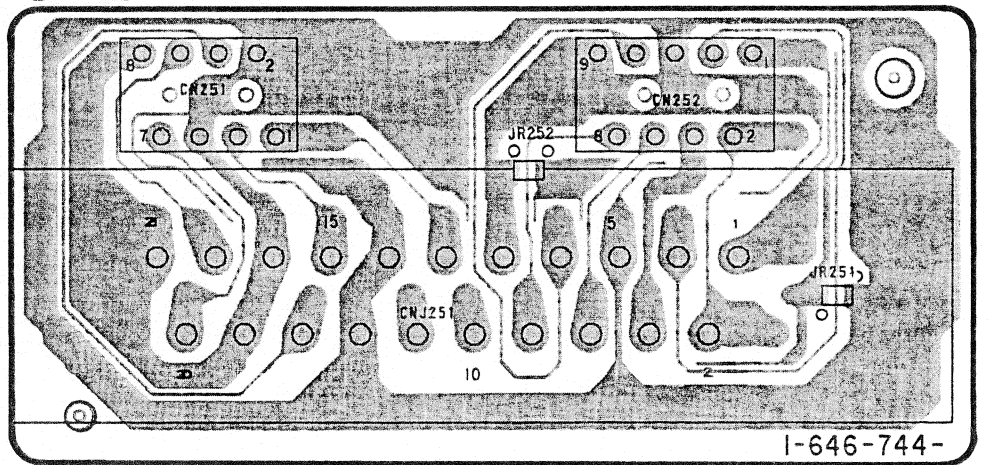
EURO-AV (LINE1)

PERITEL (LINE1)





CP-61 BOARD

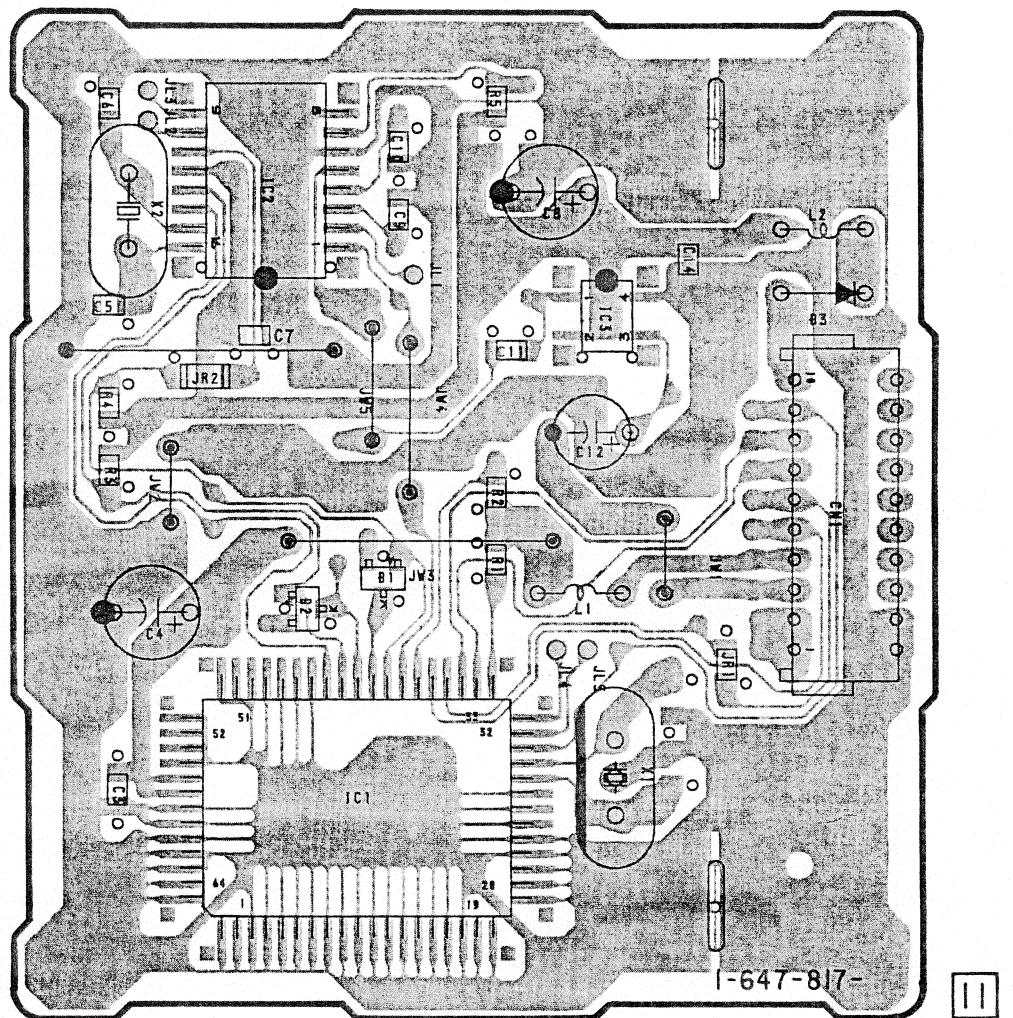


05

CANAL PLUS

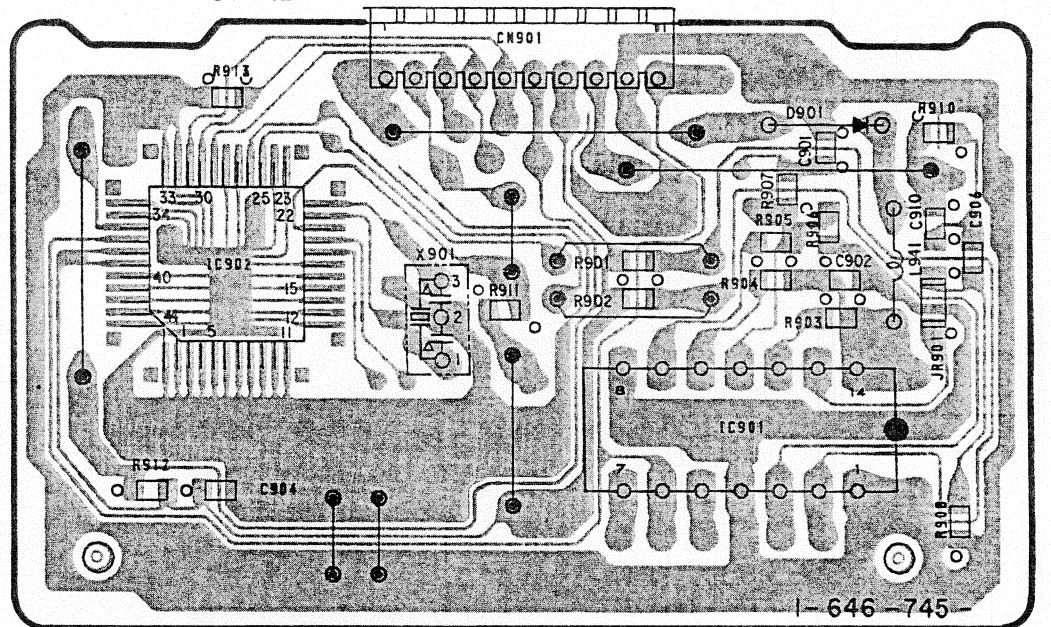
CANAL +

PD-37 BOARD



05

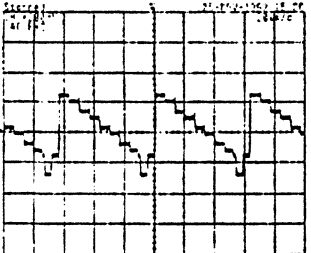
VP-32 BOARD



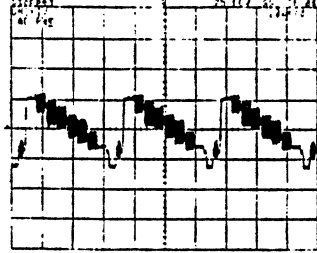
Continued from page 69.

MA-144 BOARD (2/2)

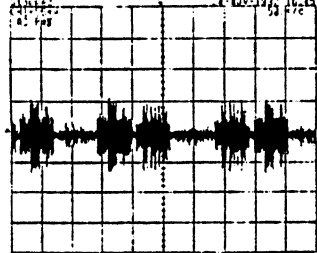
15 IC601 24 200 mV/DIV 20 μ s/DIV
4.43 REC



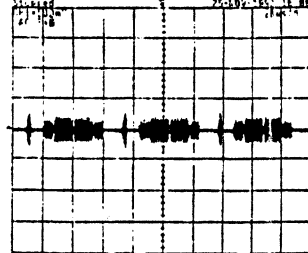
16 IC601 24 1 V/DIV 20 μ s/DIV
4.43 PB



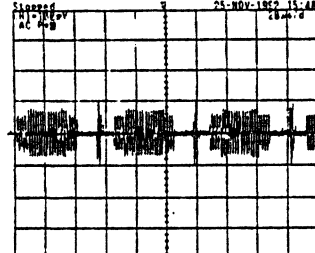
18 IC601 35 50 mV/DIV 50 μ s/DIV
SECAM REC



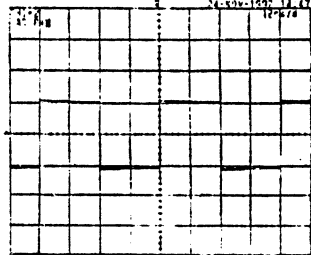
19 IC601 35 500 mV/DIV 20 μ s/DIV
4.43 PB



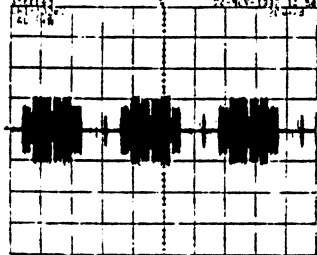
23 IC601 13 100 mV/DIV 20 μ s/DIV
4.43 REC



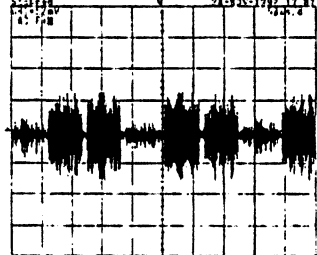
15 IC601 24 2 V/DIV 10 ms/DIV
PAL SECAM REC/PB



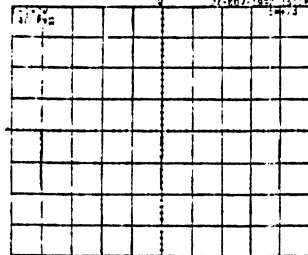
17 IC601 24 100 mV/DIV 20 μ s/DIV
PAL REC



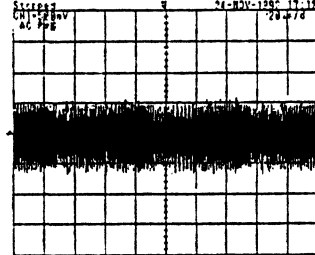
18 IC601 35 50 mV/DIV 50 μ s/DIV
SECAM PB



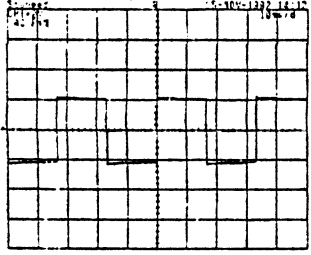
20 IC302 5 2 V/DIV 5 ms/DIV
PAL SECAM REC/PB



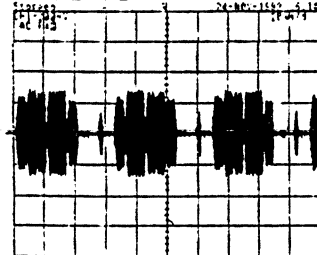
24 IC601 15 500 mV/DIV 20 μ s/DIV
SECAM PB



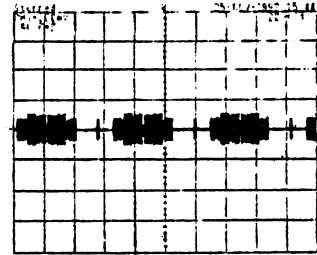
15 IC601 24 2 V/DIV 10 ms/DIV
4.43 REC/PB



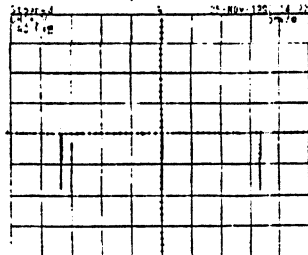
17 IC601 24 200 mV/DIV 20 μ s/DIV
PAL PB



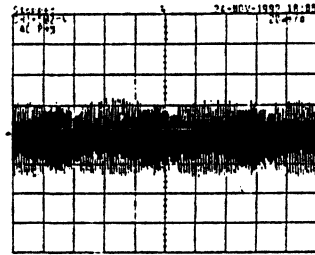
18 IC601 35 200 mV/DIV 20 μ s/DIV
4.43 REC



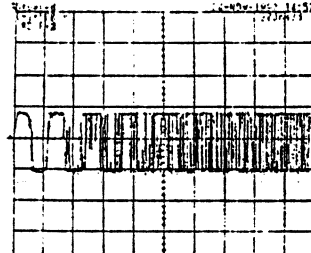
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4.43 REC/PB



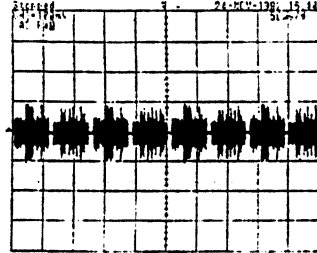
24 IC601 15 500 mV/DIV 20 μ s/DIV
PAL PB



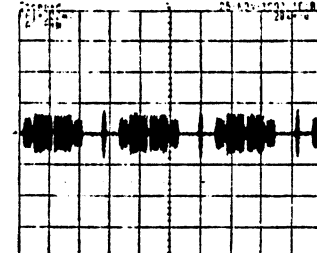
15 IC601 24 500 mV/DIV 200 ns/DIV
REC



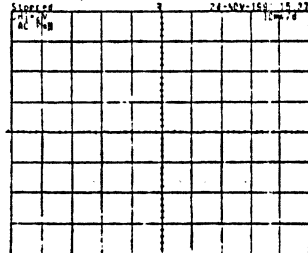
17 IC601 24 100 mV/DIV 50 μ s/DIV
SECAM REC



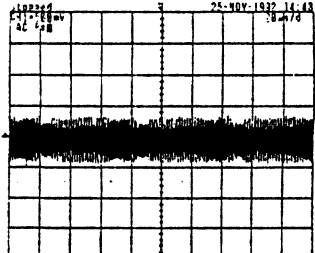
18 IC601 35 100 mV/DIV 20 μ s/DIV
4.43 PB



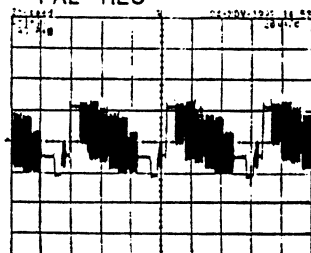
21 IC301 11 2 V/DIV 10 ms/DIV
PAL SECAM REC/PB



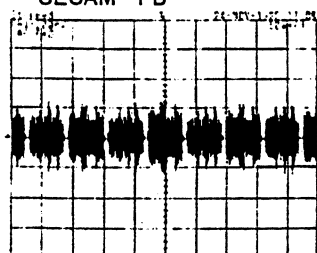
24 IC601 15 500 mV/DIV 20 μ s/DIV
4.43 PB



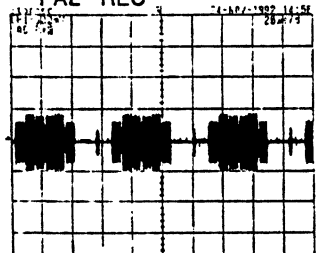
15 IC601 24 1 V/DIV 20 μ s/DIV
PAL REC



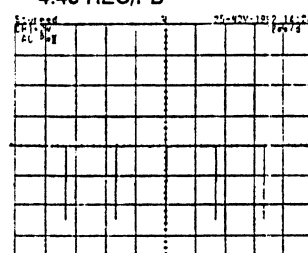
17 IC601 24 200 mV/DIV 50 μ s/DIV
SECAM PB



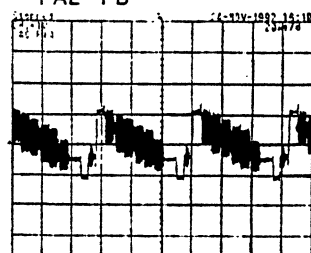
18 IC601 35 500 mV/DIV 20 μ s/DIV
PAL REC



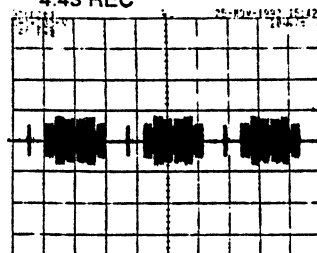
21 IC301 11 2 V/DIV 10 ms/DIV
4.43 REC/PB



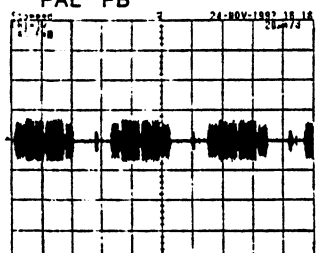
15 IC601 24 1 V/DIV 20 μ s/DIV
PAL PB



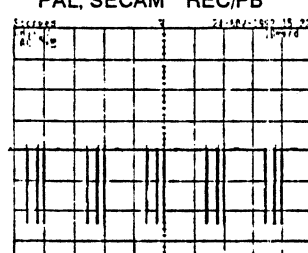
17 IC601 24 200 mV/DIV 20 μ s/DIV
4.43 REC



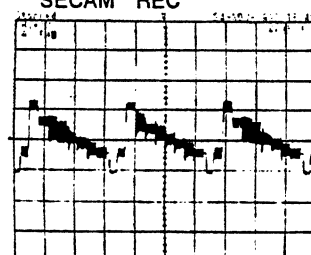
18 IC601 35 1 V/DIV 20 μ s/DIV
PAL PB



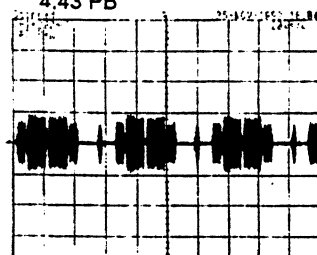
21 IC301 11 2 V/DIV 10 ms/DIV
PAL SECAM REC/PB



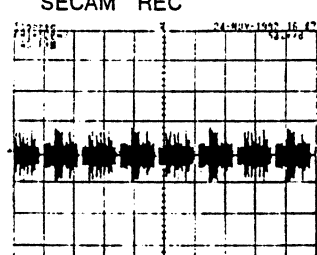
15 IC601 24 1 V/DIV 20 μ s/DIV
SECAM REC



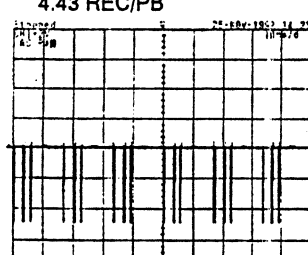
17 IC601 24 200 mV/DIV 20 μ s/DIV
4.43 PB



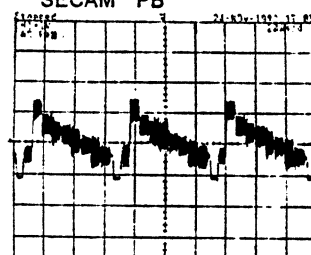
18 IC601 35 500 mV/DIV 50 μ s/DIV
SECAM REC



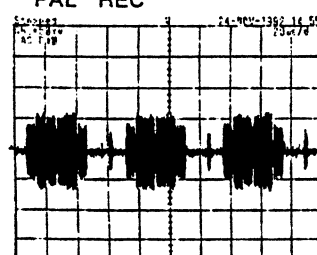
21 IC301 11 2 V/DIV 10 ms/DIV
4.43 REC/PB



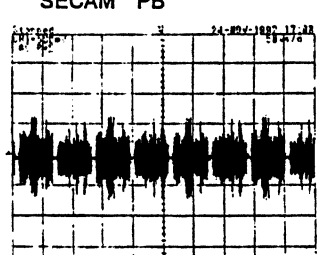
15 IC601 24 1 V/DIV 20 μ s/DIV
SECAM PB



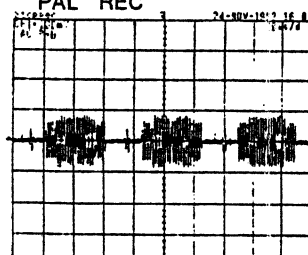
18 IC601 35 50 mV/DIV 20 μ s/DIV
PAL REC



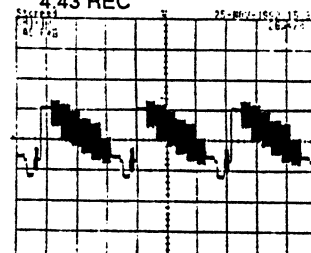
18 IC601 35 500 mV/DIV 50 μ s/DIV
SECAM PB



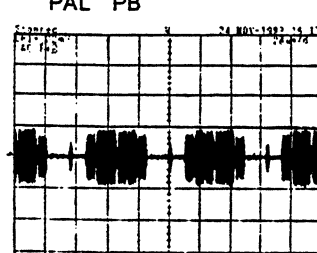
23 IC601 13 100 mV/DIV 20 μ s/DIV
PAL REC



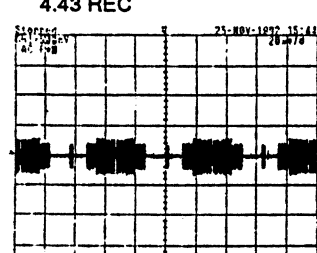
15 IC601 24 1 V/DIV 20 μ s/DIV
4.43 REC



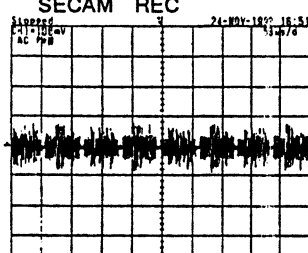
18 IC601 35 100 mV/DIV 20 μ s/DIV
PAL PB



18 IC601 35 500 mV/DIV 50 μ s/DIV
4.43 REC

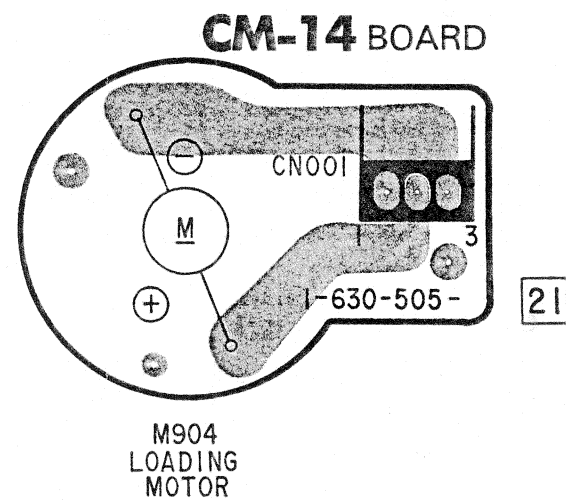
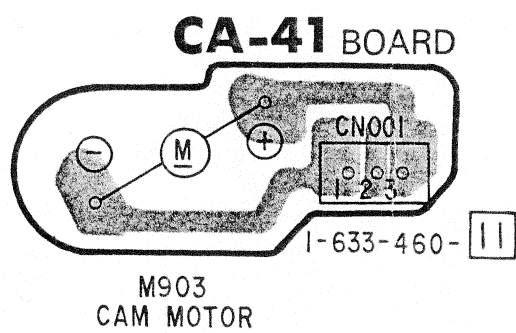


23 IC601 13 100 mV/DIV 50 μ s/DIV
SECAM REC



MD-56 BOARD

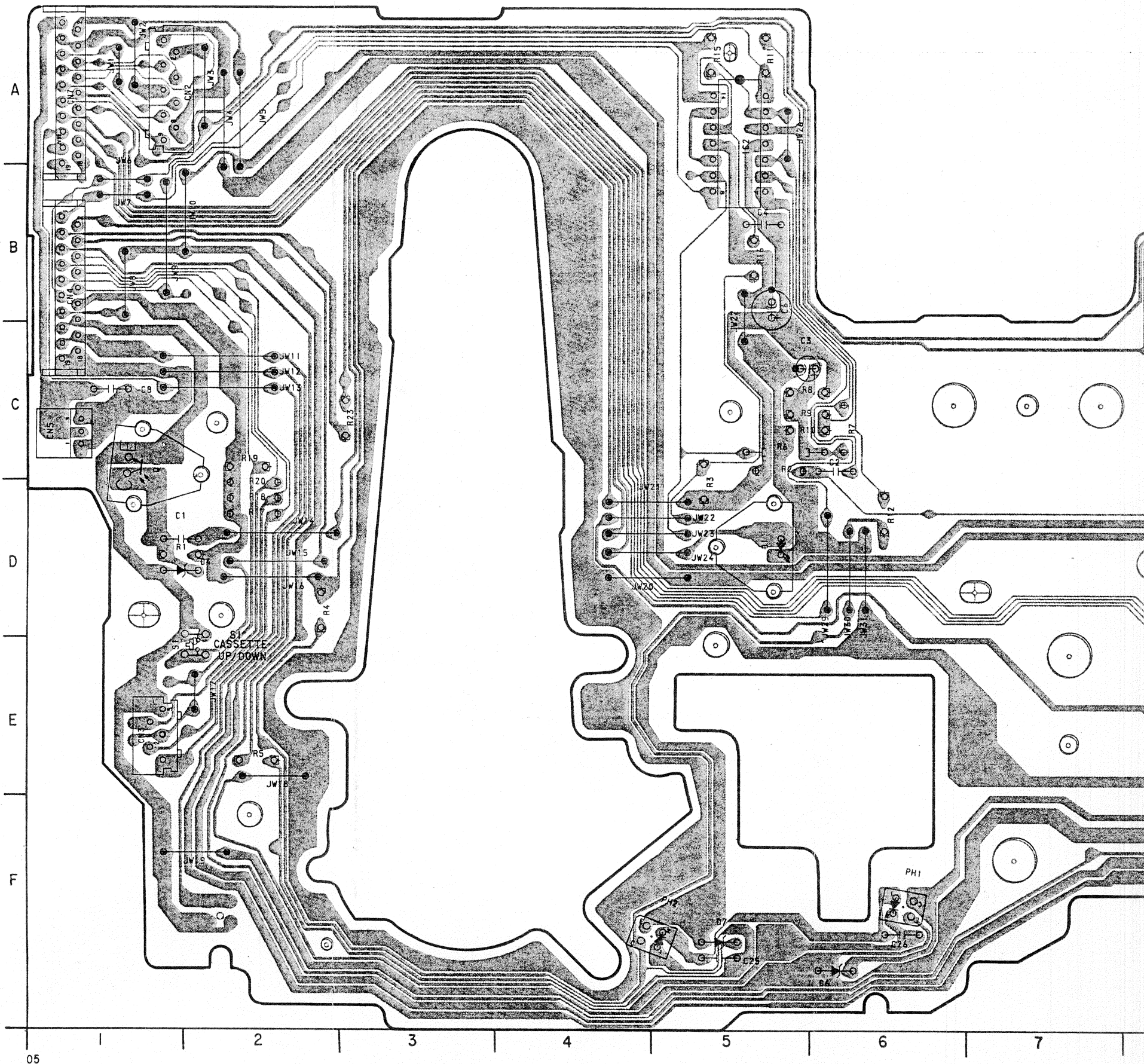
D1	D-5
D4	D-2
D5	D-8
D6	G-6
D7	F-5
IC1	B-8
IC2	A-5
IC3	C-8
PH1	F-4
PH2	F-6
Q1	C-1
Q2	C-8



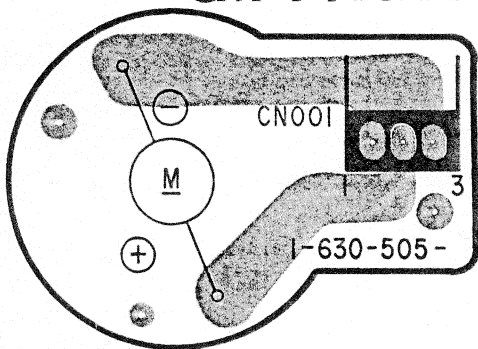
MD-56 BOARD

MD-56 BOARD

D1	D-5
D4	D-2
D5	D-9
D6	G-6
D7	F-5
IC1	B-8
IC2	A-5
IC3	C-8
PH1	F-4
PH2	F-6
Q1	C-1
Q2	C-9

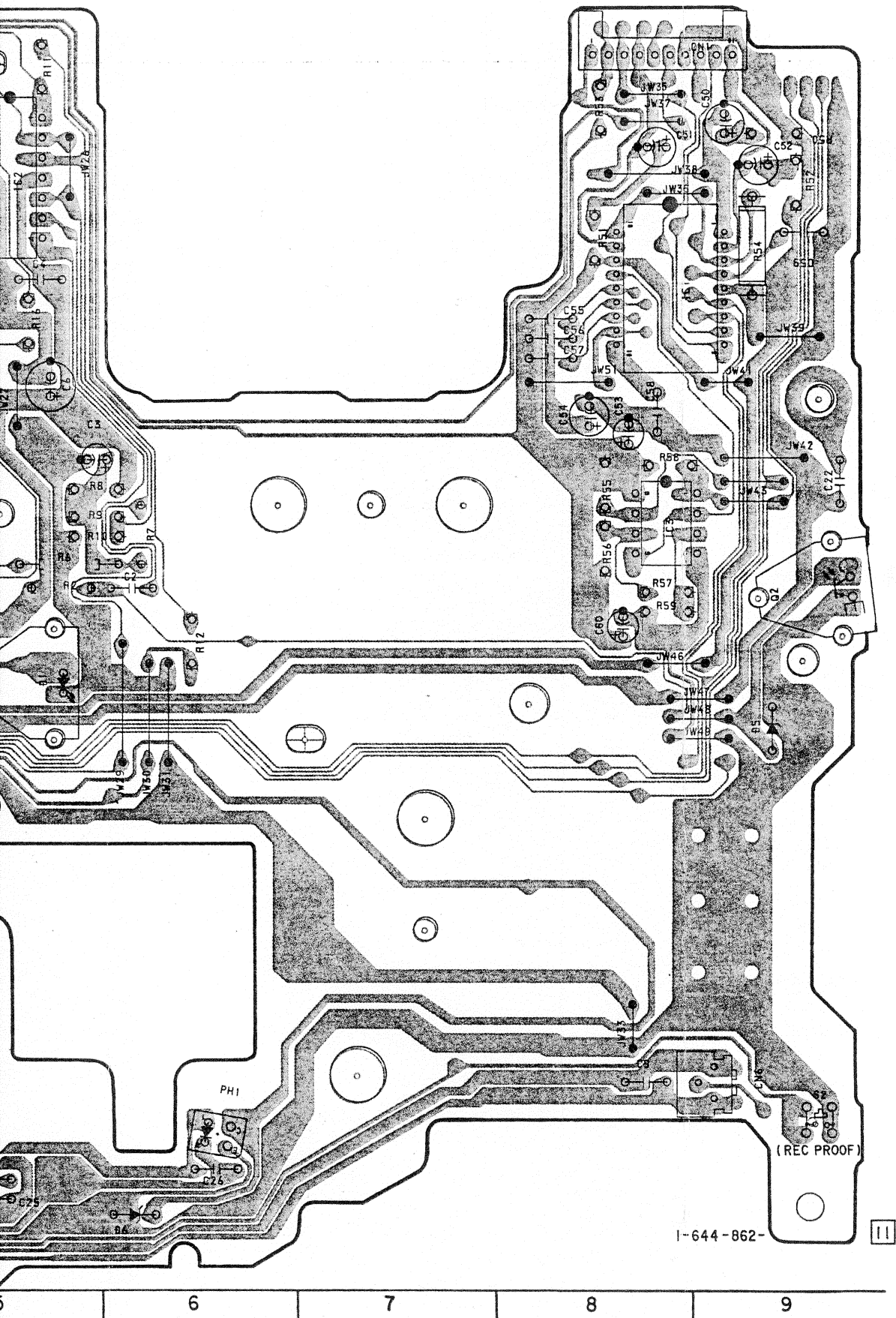


CM-14 BOARD



21

M904
LOADING
MOTOR

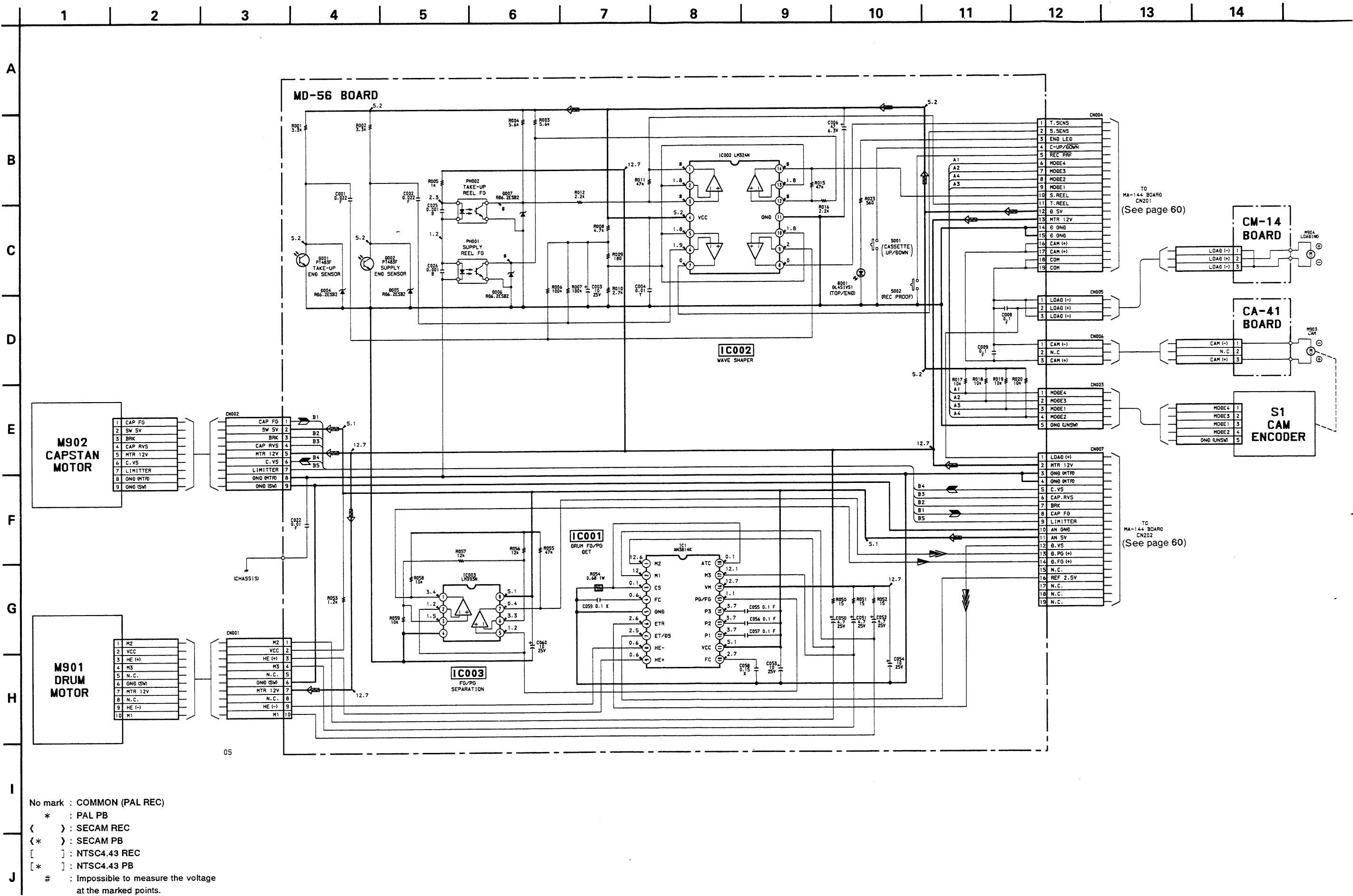


• Signal path

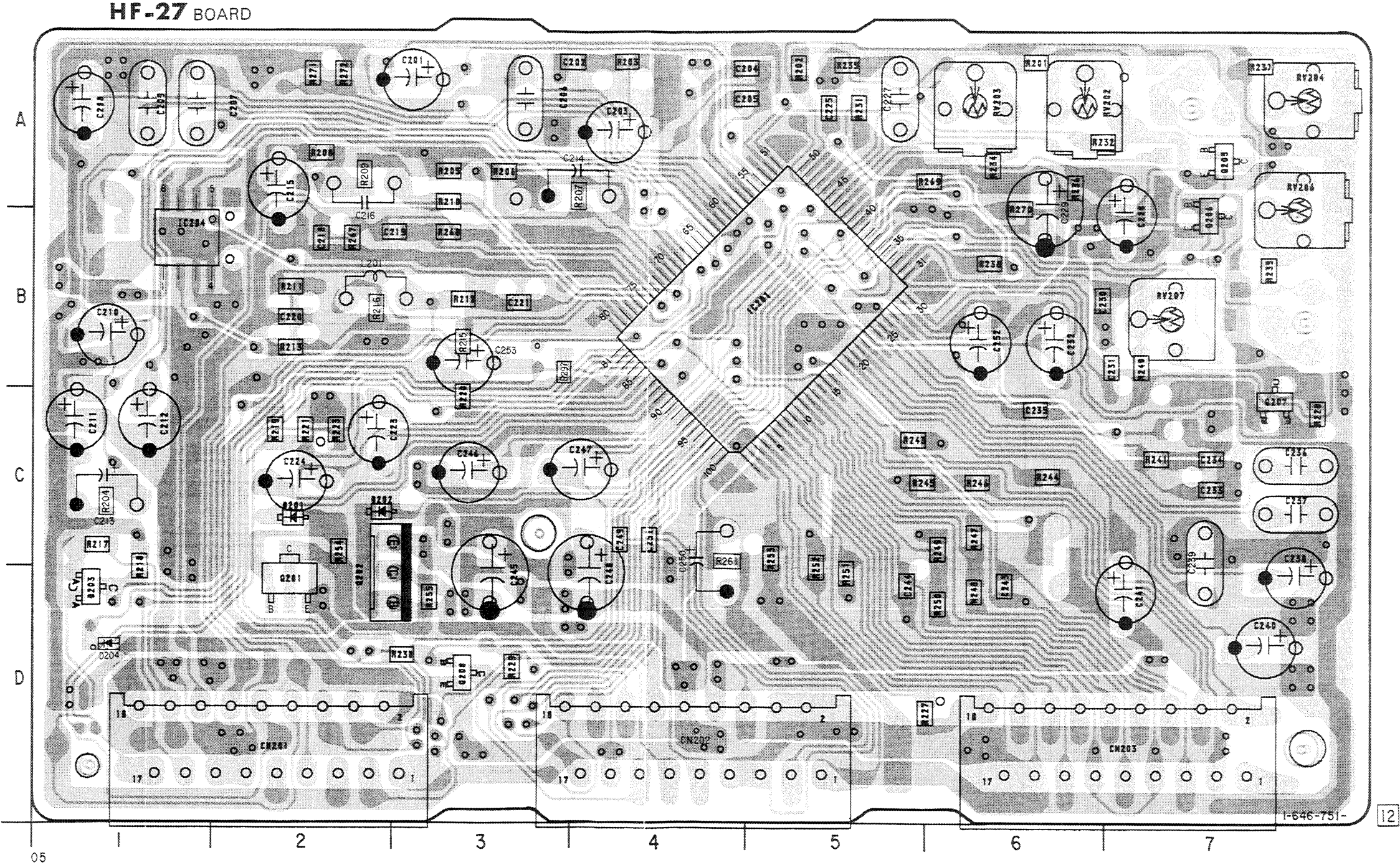
	REC	REC/PB	PB
Drum speed servo		▶	
Drum phase servo		▶▶	
Drum servo (speed and phase)		▶▶▶	
Capstan speed servo		▶	
Capstan phase servo	▶▶	▶▶	▶▶▶
Capstan servo (speed and phase)		▶▶▶	
Ref. signal	▶▶▶		▶▶▶

MD-56 (MECHANISM DRIVE), CA-41 (CAM MOTOR), CM-14 (LOADING MOTOR) SCHEMATIC DIAGRAM

- Ref. No.: MD-56, CA-41 and CM-14 Boards; 3,000 series -



HF-27 (HiFi AUDIO) PRINTED WIRING BOARD
- Ref. No.: HF-27 Board; 4,000 series -



< DIODE >

D201 8-719-404-46 MA110
D202 8-719-404-46 MA110
D203 8-719-400-16 MA152WK
D204 8-719-404-46 MA110

< IC >

IC201 8-759-160-54 XLH772KS-VP
IC204 8-759-089-84 BA7755AF-T1

< TRANSISTOR >

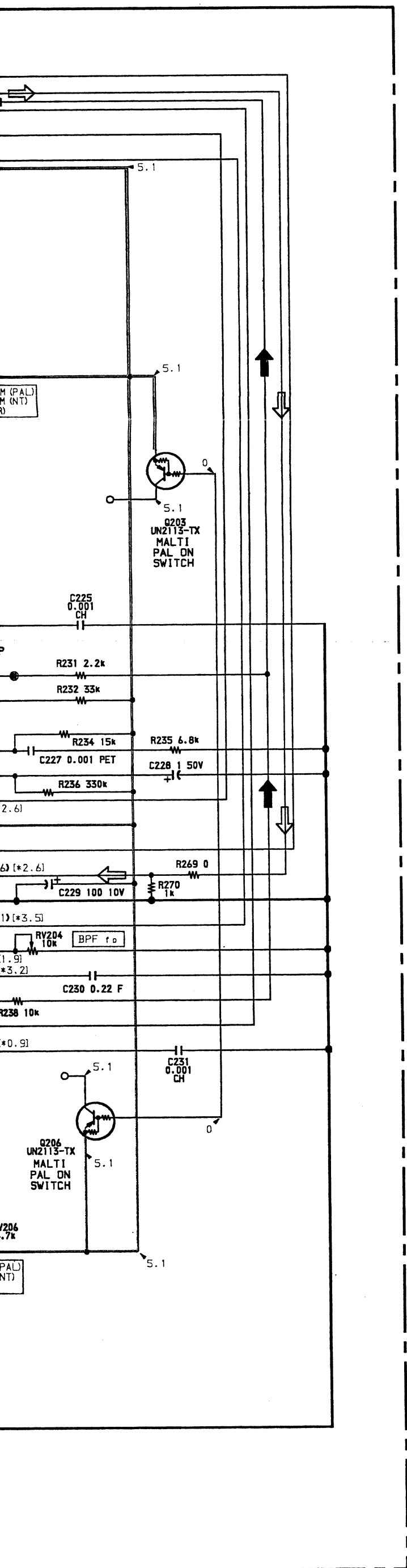
Q201 8-729-808-01 2SD1622-S
Q202 8-729-141-83 2SA473
Q203 8-729-424-18 UN2113
Q206 8-729-424-18 UN2113
Q208 8-729-421-19 UN2213

HF-27 BOARD

D201 C-2
D202 C-2
D203 D-1
D204 D-1

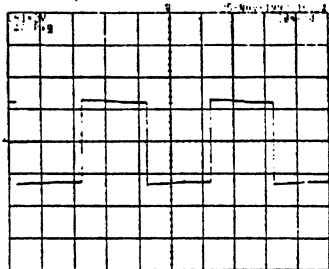
IC201 B-4
IC204 B-1

Q201 D-2
Q202 D-2
Q203 A-7
Q206 B-7
Q208 D-3

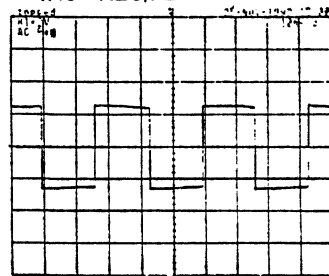


HF-27 BOARD

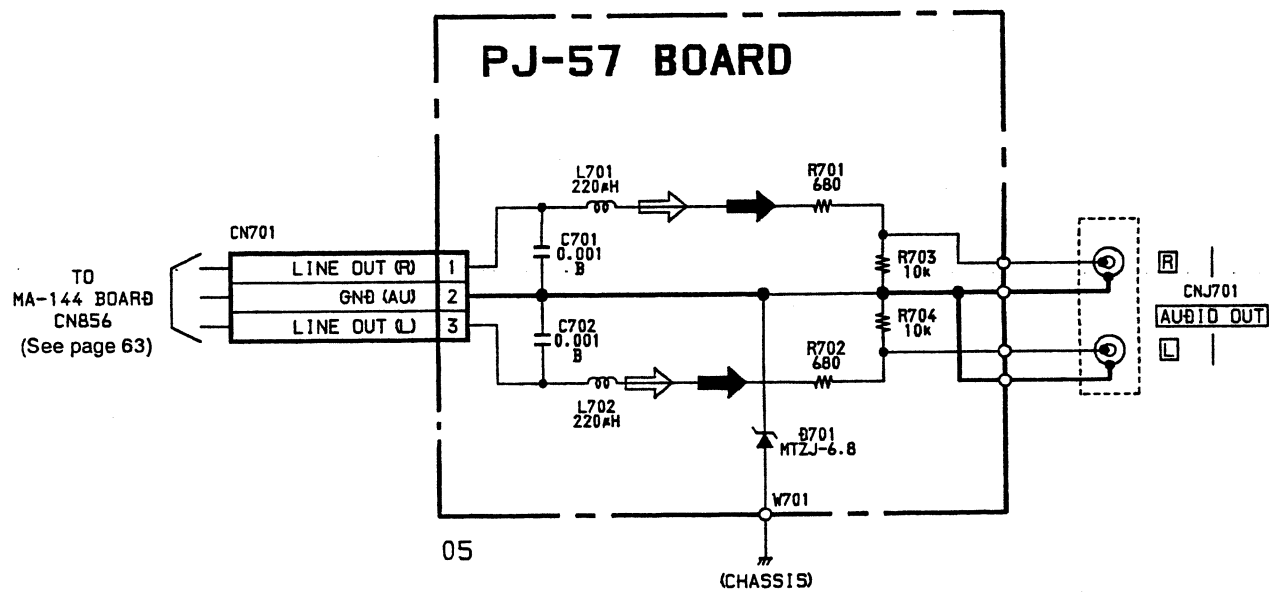
① IC201 @ 2 V/DIV 10 ms/DIV
PAL, SECAM REC/PB



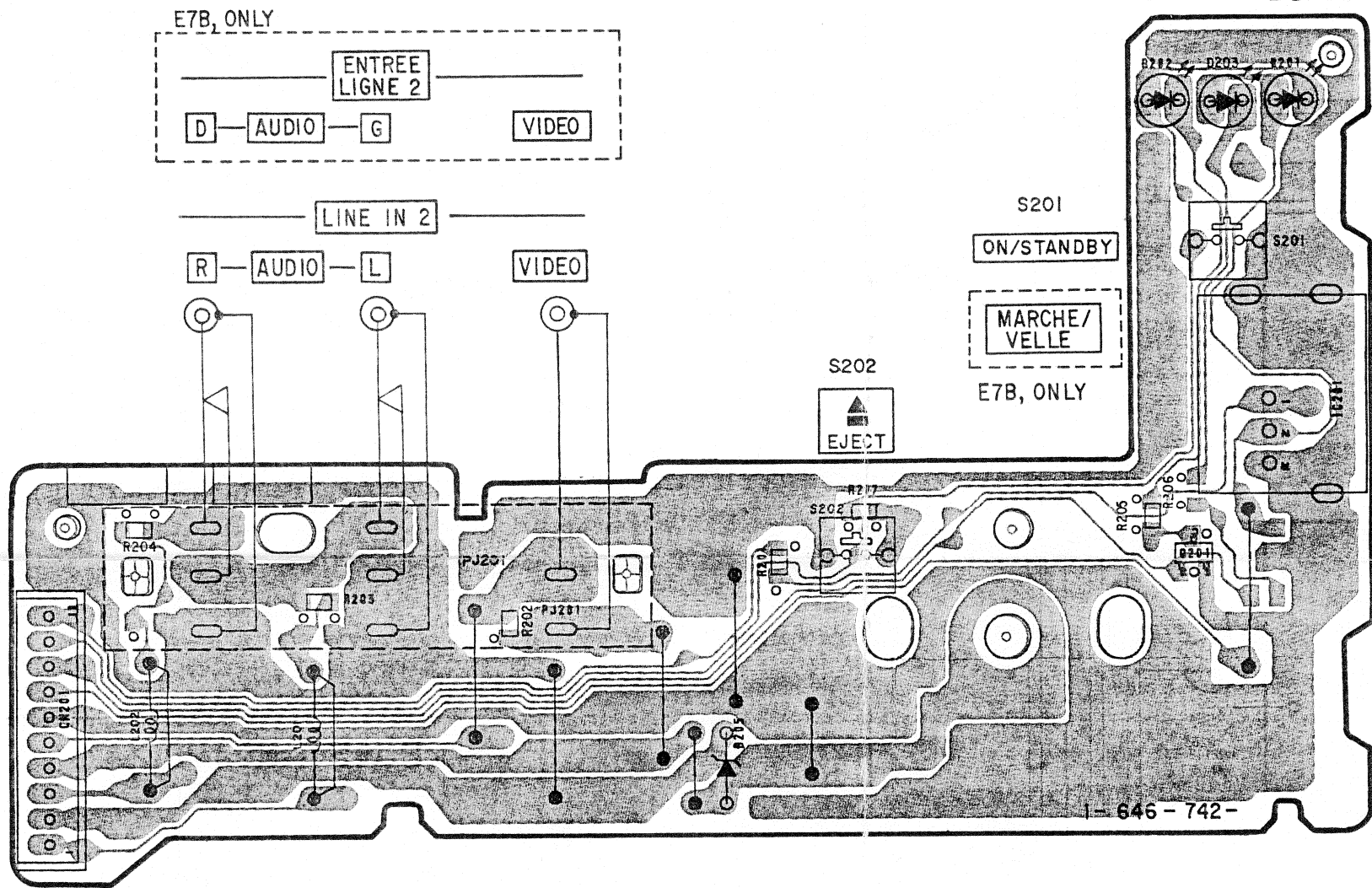
② IC201 @ 2 V/DIV 10 ms/DIV
4.43 REC/PB



PJ-57 BOARD



MF-171 BOARD

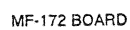


05

< IC >

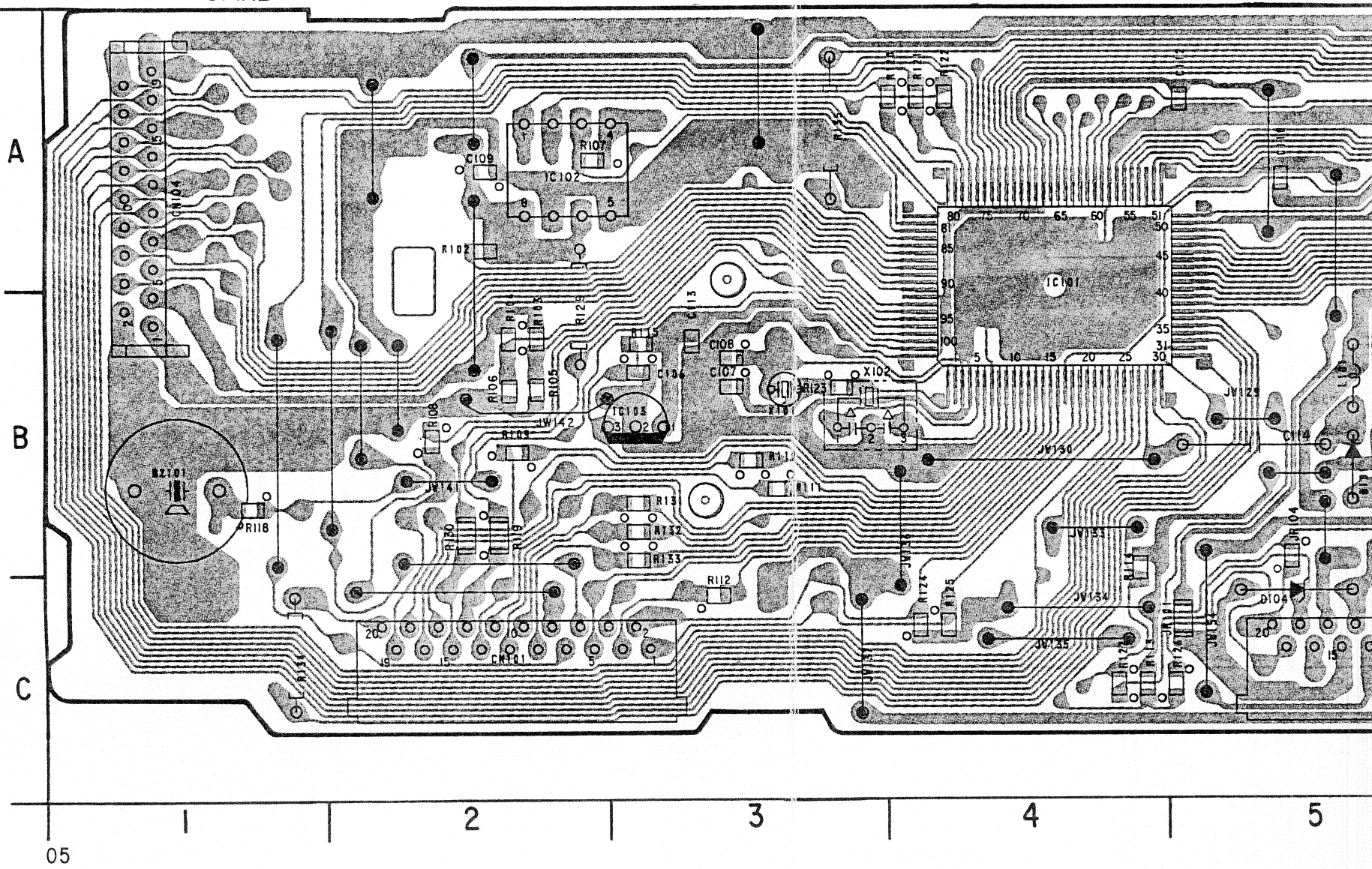
IC101 8-759-172-62 MB89095-116

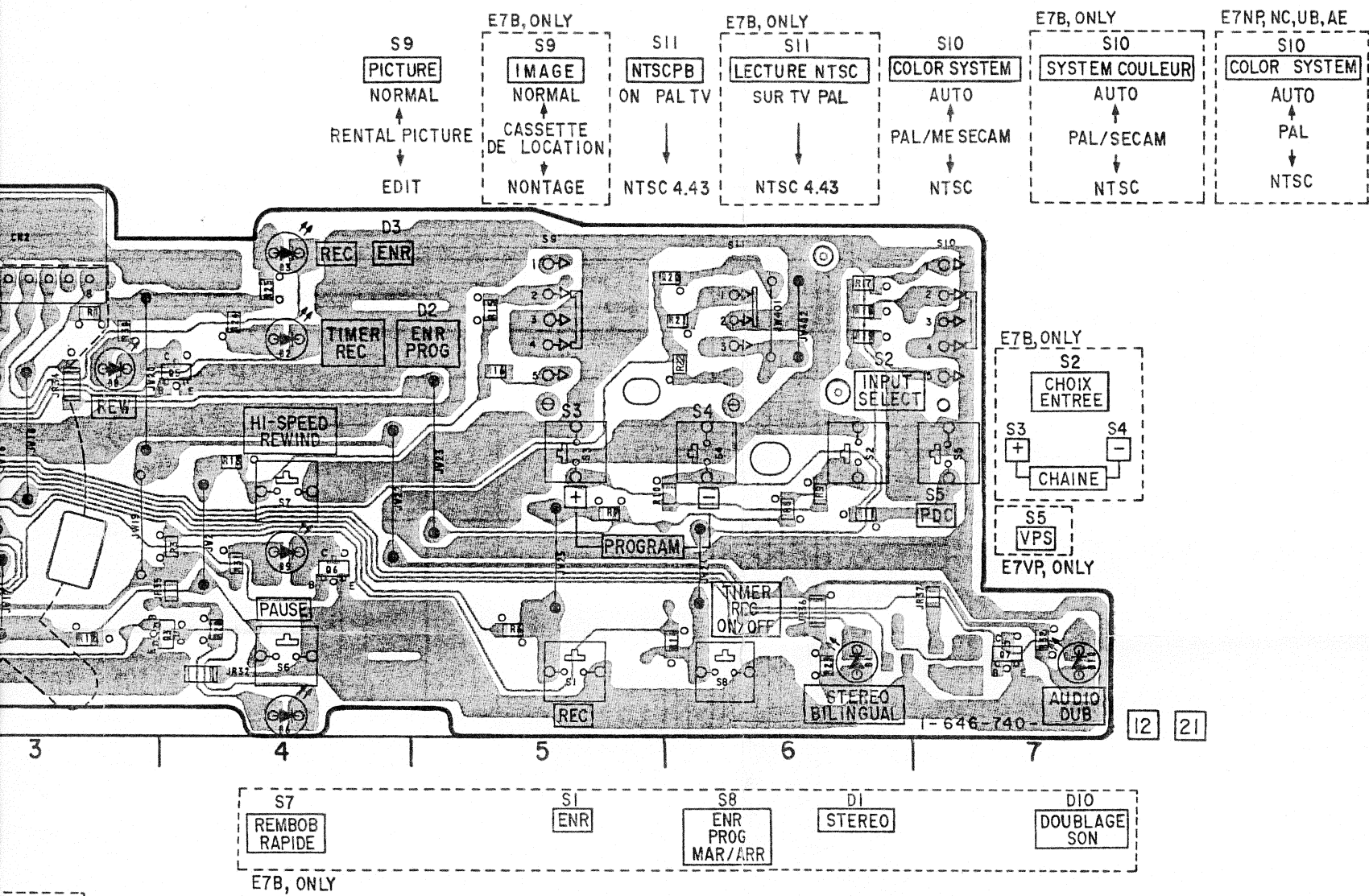
MF-172 BOARD



D101	B-5
D102	B-5
D104	C-5
D107	C-7

IC101	A-4
IC102	A-2
IC103	B-3
IC104	B-6





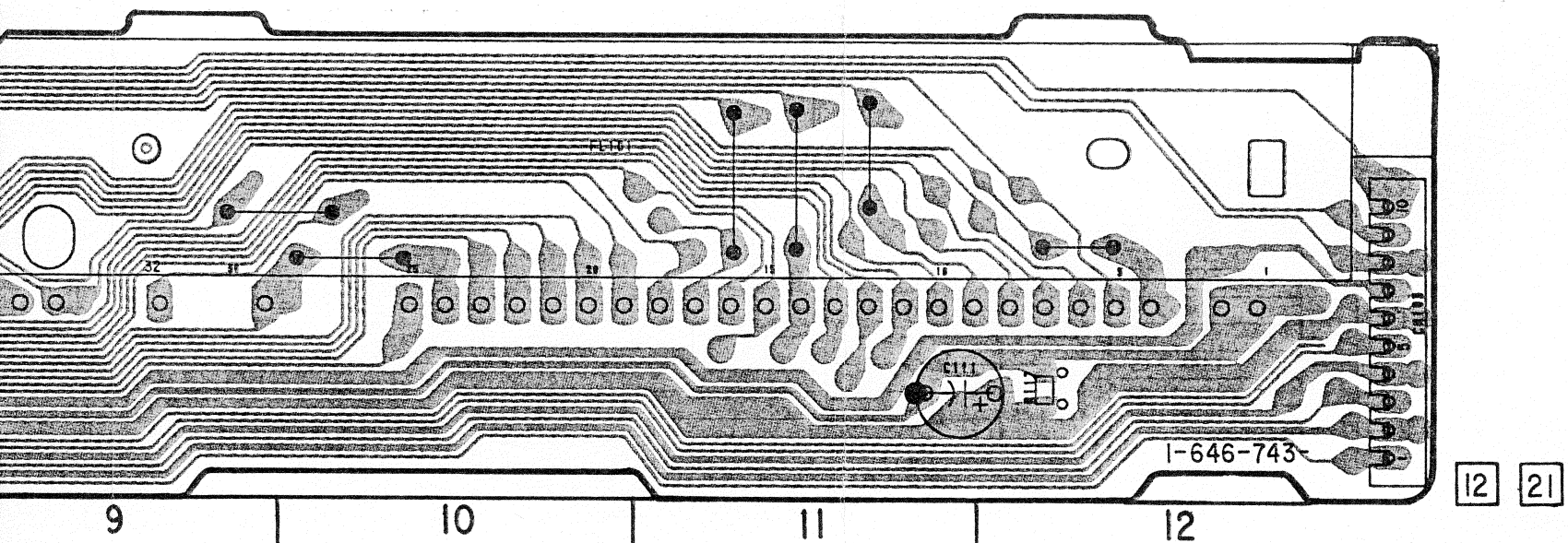
MF-173 BOARD

D001	B-6
D002	A-4
D003	A-4
D004	A-1
D005	A-2
D006	B-4
D007	A-2
D008	A-3
D009	B-4
D010	B-7
D012	A-1
Q001	A-2
Q002	A-2
Q003	A-2
Q004	B-4
Q005	A-4
Q006	B-4
Q007	B-7
Q009	B-1

< TRANSISTOIR >

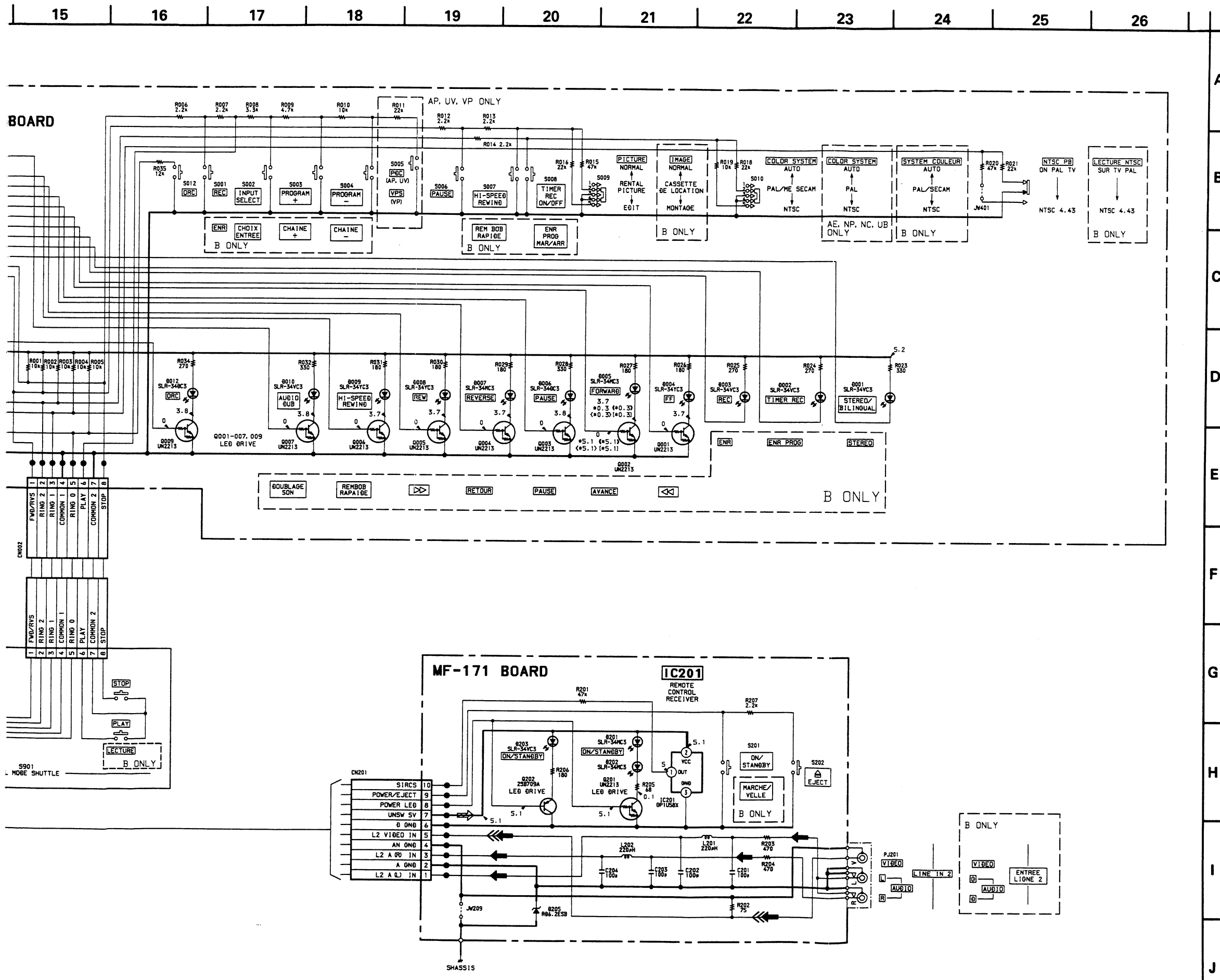
Q001	8-729-421-19	UN2213
Q002	8-729-421-19	UN2213
Q003	8-729-421-19	UN2213
Q004	8-729-421-19	UN2213
Q005	8-729-421-19	UN2213
Q006	8-729-421-19	UN2213
Q007	8-729-421-19	UN2213
Q009	8-729-421-19	UN2213

910



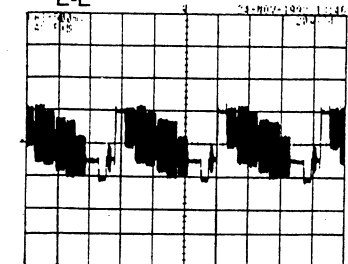
– Ref. No.: MF-171, MF-172 and MF-173 Boards; 5,000 series –



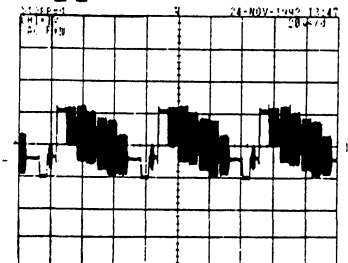


TU-136 BOARD

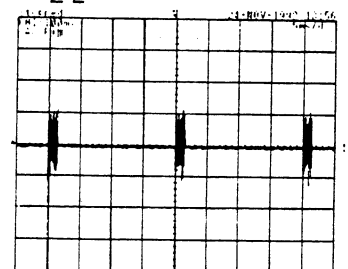
① CN002 ① 500 mV/DIV 20 μ s/DIV
E-E



② TU2 ② 1 V/DIV 20 μ s/DIV
E-E



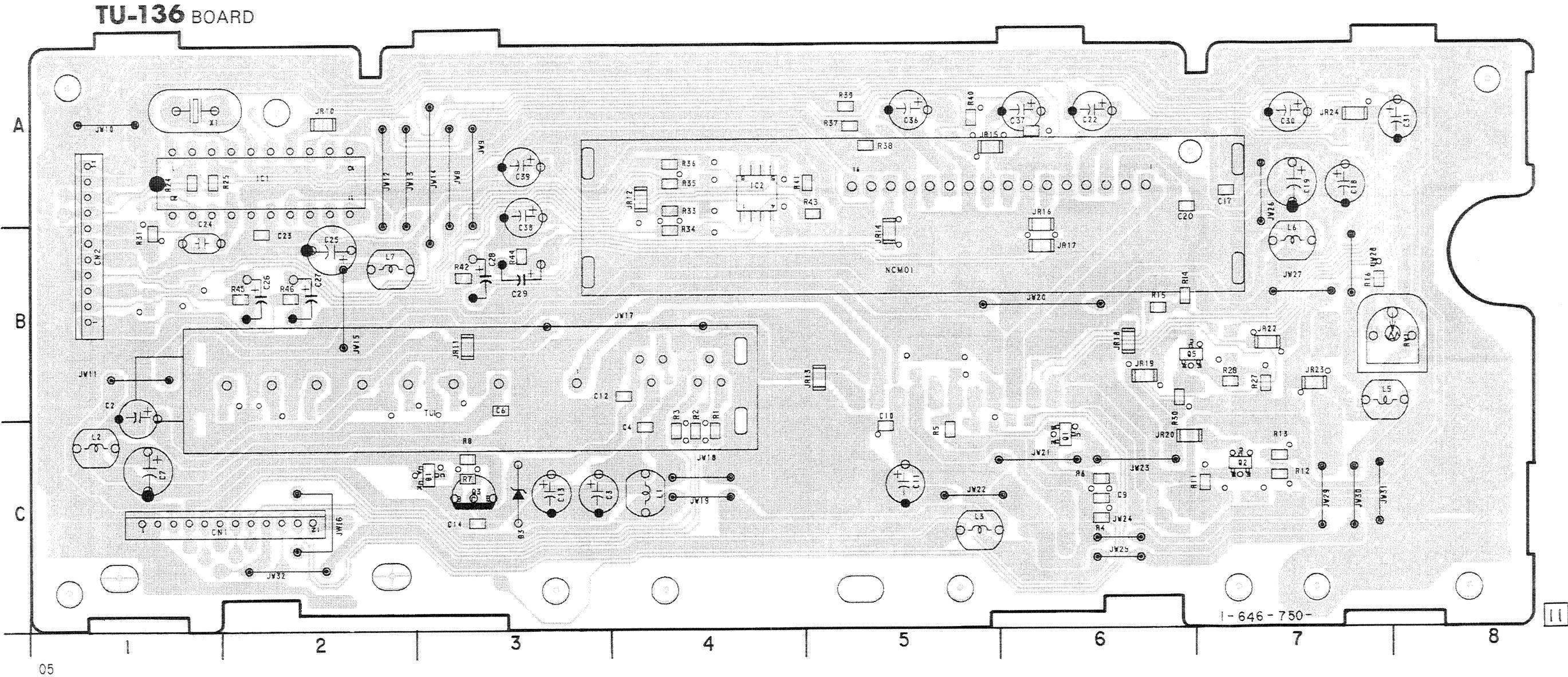
③ IC001 ④ 100 mV/DIV 5 ms/DIV
E-E



– Ref. No.: TU-27 Board; 6,000 series –



TU-136 (TUNER) PRINTED WIRING BOARD
- Ref. No.: TU-27 Board; 6,000 series -



TU-136 BOARD

D001	C-3
D003	C-3
IC001	A-1
IC002	A-4
Q001	C-6
Q002	C-7
Q003	C-3
Q005	B-6

< DIODE >

D001 8-719-800-76 1SS226

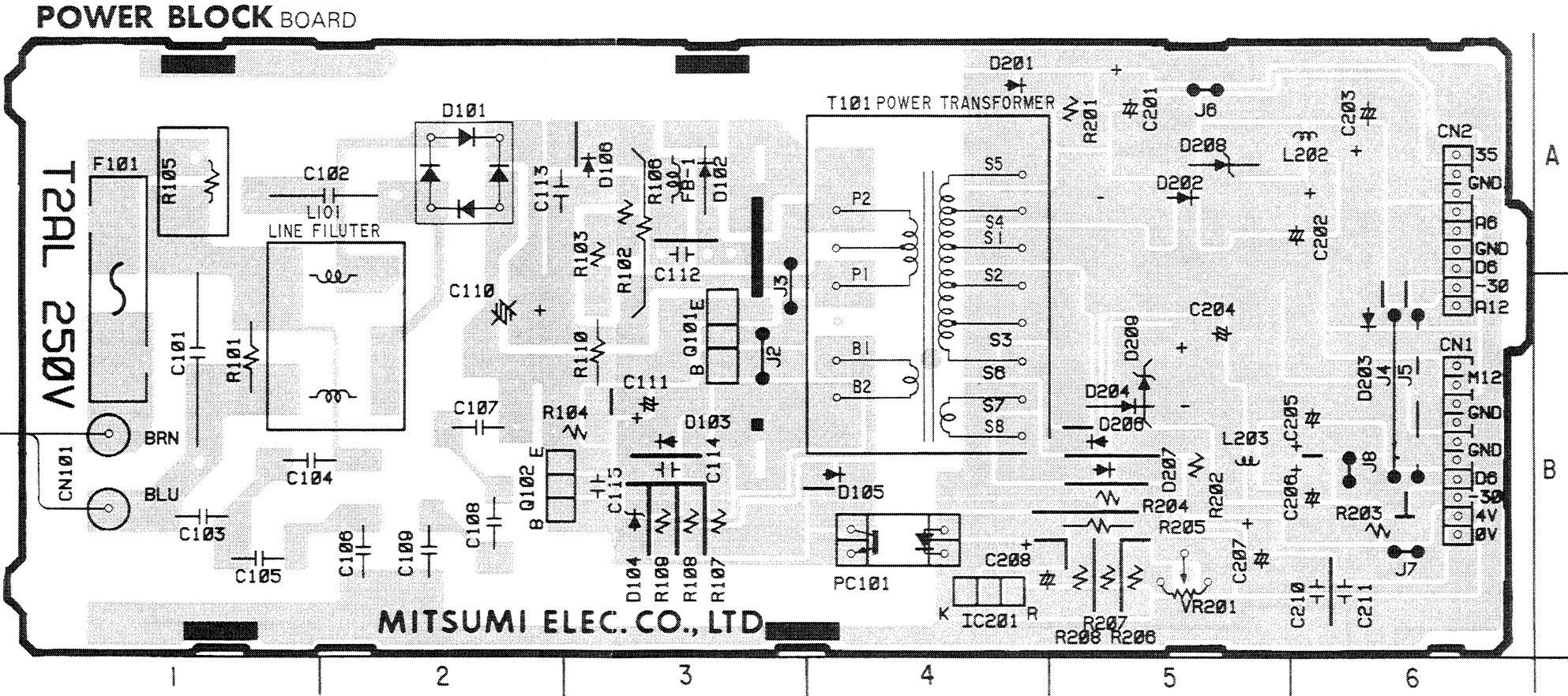
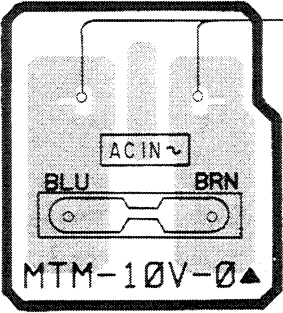
< TRANSISTOR >

Q001 8-729-422-27 2SD601A-Q
Q002 8-729-422-27 2SD601A-Q

No mark : COMMON (PAL REC)
* : PAL PB
< : SECAM REC
< * : SECAM PB
[: NTSC4.43 REC
[* : NTSC4.43 PB
: Impossible to measure the voltage at the marked points.

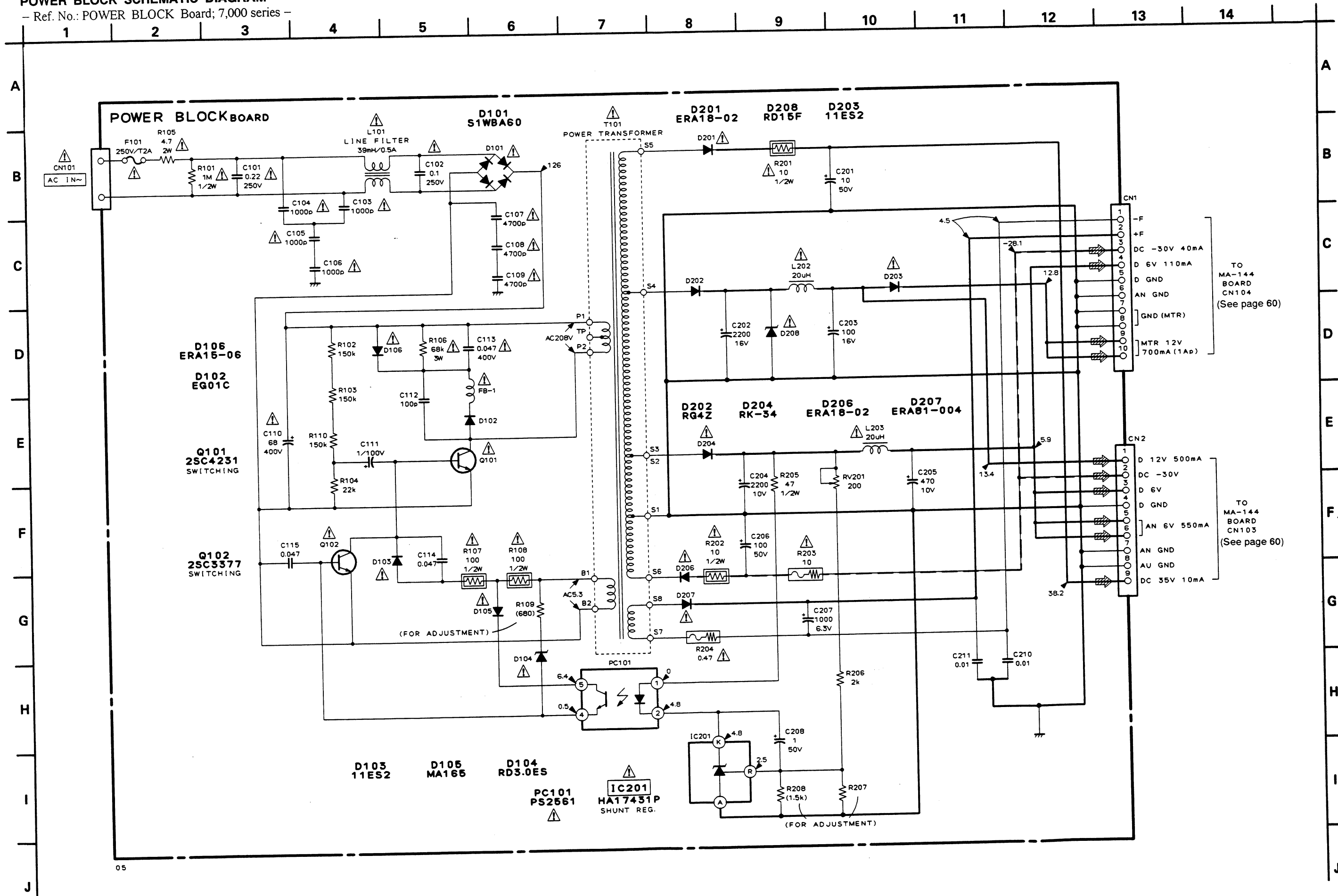
• Signal path

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC	⇒	⇒⇒	⇒⇒⇒	⇒
PB	⇒	⇒⇒	⇒⇒⇒	⇒



POWER BLOCK SCHEMATIC DIAGRAM

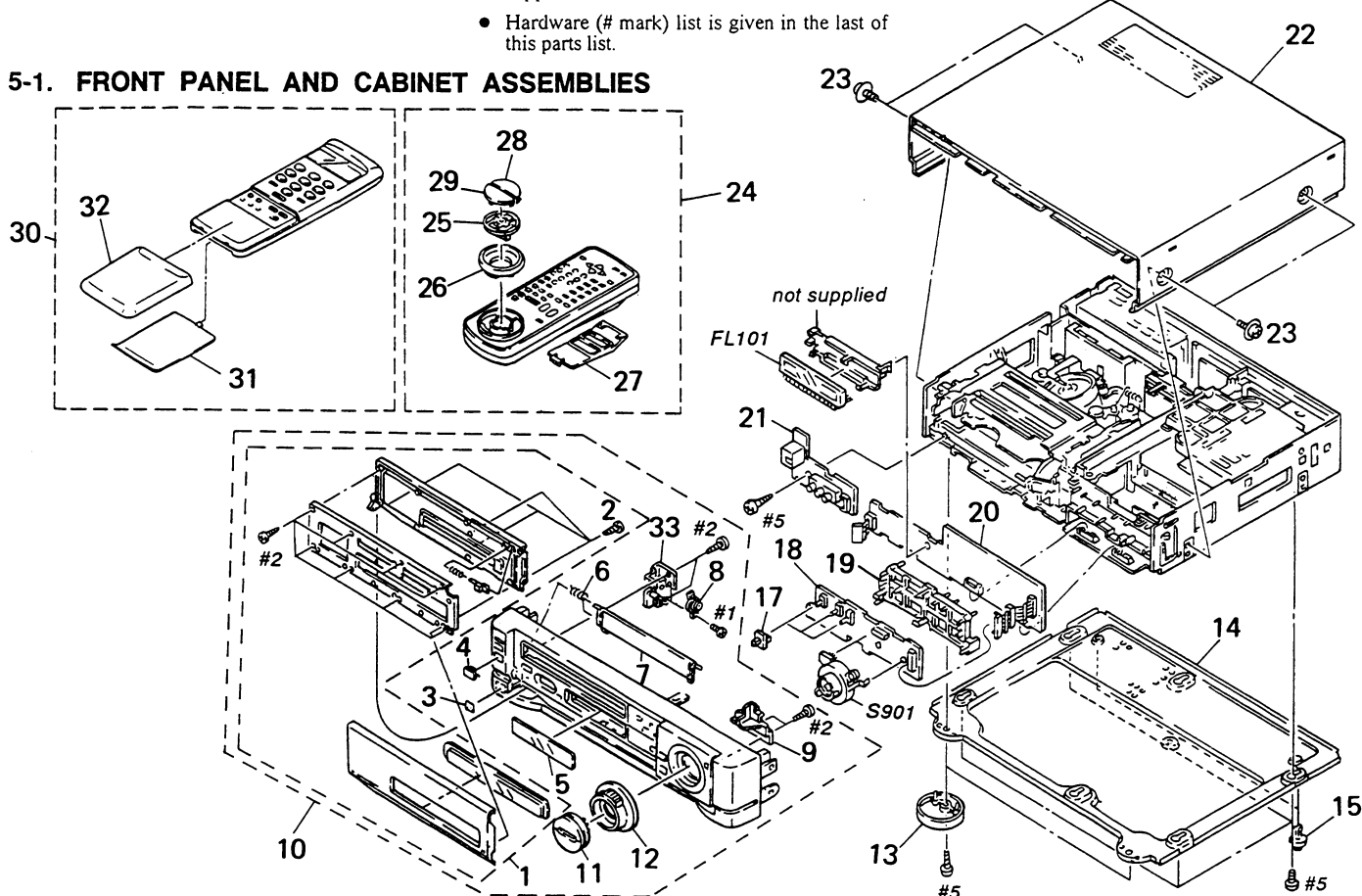
— Ref. No.: POWER BLOCK Board; 7,000 series —



SECTION 5
EXPLODED VIEWS

- NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
 - Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
 - The mechanical parts with no reference number in the exploded views are not supplied.
 - Hardware (# mark) list is given in the last of this parts list.
- The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

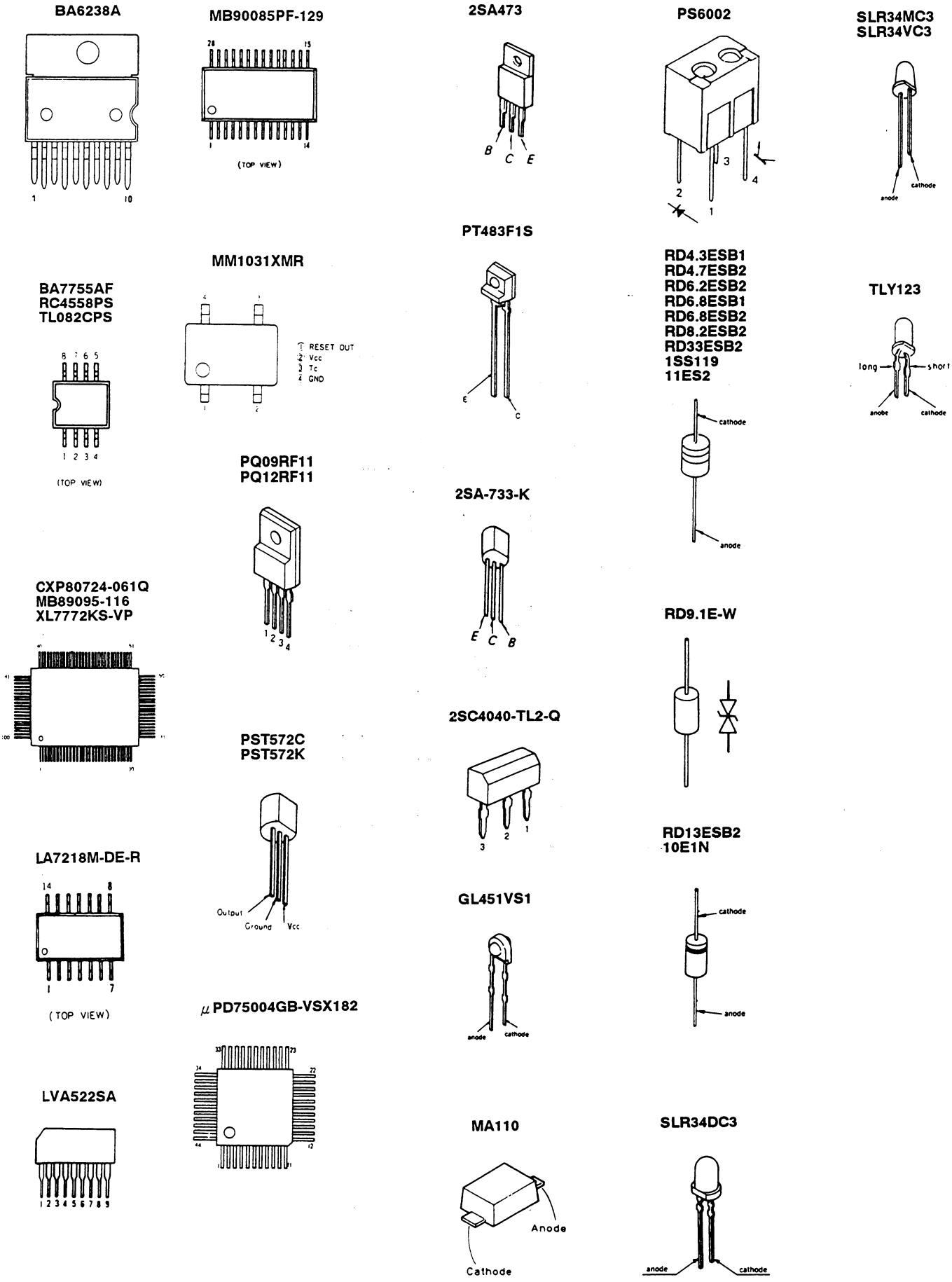
5-1. FRONT PANEL AND CABINET ASSEMBLIES



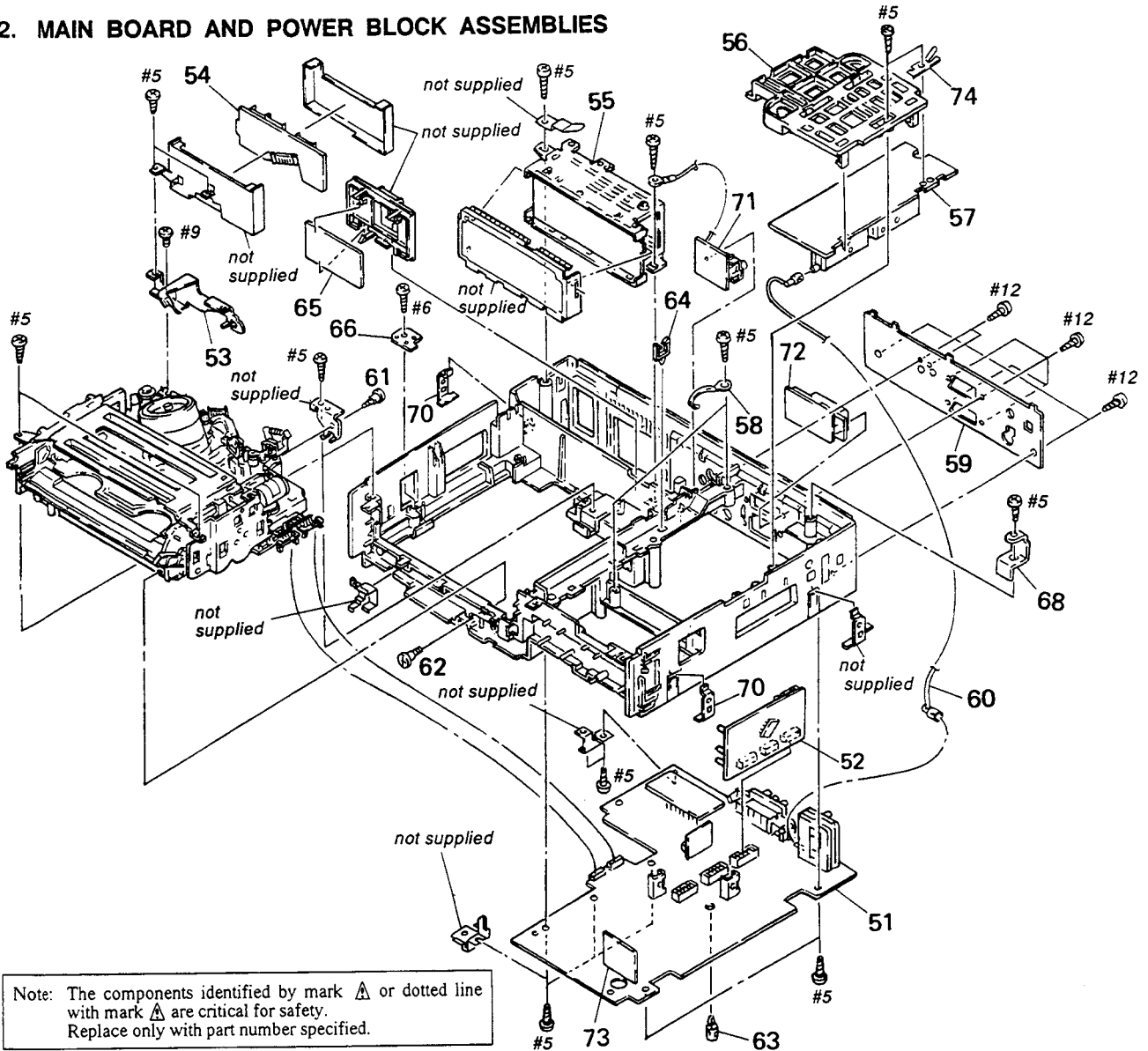
Ref. No.	Part No.	Description	Remark
1	X-3942-294-1	DOOR BLOCK ASSY (H), HALF (E7:AE, VP)	
1	X-3942-295-1	DOOR BLOCK ASSY (H), HALF (E7:NC, UB)	
1	X-3942-301-1	DOOR BLOCK ASSY (H), HALF (E7:B)	
1	X-3942-307-1	DOOR BLOCK ASSY (H), HALF (E7:NP)	
2	4-908-792-31	SCREW (B2) (M2X4), TAPPING	
* 3	3-703-713-41	STICKER, SONY SYMBOL (10)	
4	3-946-620-01	FILTER, REMOTE CONTROL	
5	3-951-087-01	PLATE, TRANSPARENT, PANEL	
6	3-951-089-01	SPRING (GE), FL	
7	3-951-086-31	DOOR, CASSETTE (E7:B)	
8	3-319-224-11	DAMPER, SMALL	
9	3-951-080-01	PLATE (RIGHT), FULCRUM, DOOR	
10	X-3942-290-1	PANEL ASSY, FRONT (E7:AE)	
10	X-3942-293-1	PANEL ASSY, FRONT (E7:NC, UB)	
10	X-3942-296-1	PANEL ASSY, FRONT (E7:VP)	
10	X-3942-298-1	PANEL ASSY, FRONT (E7:B)	
10	X-3942-302-1	PANEL ASSY, FRONT (E7:NP)	
10	X-3942-736-1	PANEL ASSY, FRONT (E7:AP)	
10	X-3942-737-1	PANEL ASSY, FRONT (E8UV)	
10	X-3943-023-1	PANEL ASSY, FRONT (ER7UY)	
11	X-3942-217-1	BUTTON ASSY, FUNCTION (ER7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)	
11	X-3942-377-1	BUTTON ASSY, FUNCTION (E7:B)	
12	3-944-572-11	RING, SHUTTLE	
13	3-951-093-01	INSULATOR	
* 14	3-953-561-01	PLATE, BOTTOM	
15	3-670-155-11	LEG	
17	3-744-217-01	KNOB, SELECTION	

Ref. No.	Part No.	Description	Remark
* 18	A-6756-885-A	MF-173 BOARD, COMPLETE (ER7UY/E7:AE, B, NC, NP, UB)	
* 18	A-6756-895-A	MF-173 BOARD, COMPLETE (E7:AP, VP/E8UV)	
19	3-951-084-01	HOLDER, MF	
* 20	A-6756-883-A	MF-172 BOARD, COMPLETE (E7:AE, AP)	
* 20	A-6756-887-A	MF-172 BOARD, COMPLETE (ER7UY/E7:UB/E8UV)	
* 20	A-6756-889-A	MF-172 BOARD, COMPLETE (E7:NP)	
* 20	A-6756-892-A	MF-172 BOARD, COMPLETE (E7:NC)	
* 20	A-6756-893-A	MF-172 BOARD, COMPLETE (E7:VP)	
* 20	A-6756-897-A	MF-172 BOARD, COMPLETE (E7:B)	
* 21	A-6754-471-A	MF-171 BOARD, COMPLETE	
22	3-741-985-01	CASE, UPPER	
23	3-710-901-11	SCREW (TP3X8), CASE	
24	1-466-918-11	REMOTE COMMANDER (RMT-V131) (ER7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)	
24	1-466-918-31	REMOTE COMMANDER (RMT-V131B) (E7:B)	
25	3-941-619-11	HOLDER, DIAL	
26	3-951-746-01	RING, SHUTTLE	
27	3-943-535-01	COVER, BATTERY	
28	3-941-617-61	BUTTON, PLAYBACK	
29	3-941-618-51	BUTTON, STOP	
30	1-466-935-21	REMOTE COMMANDER (RMT-AG1)	
31	3-953-580-01	COVER, BATTERY	
32	3-953-581-01	COVER, SLIDE	
33	X-3942-319-1	PLATE (LEFT) BLOCK ASSY, FULCRUM	
FL101	1-517-132-11	INDICATOR TUBE, FLUORESCENT	
S901	1-572-662-11	SWITCH ROTARY (DUAL MODE SHUTTLE)	

4-3. SEMICONDUCTORS



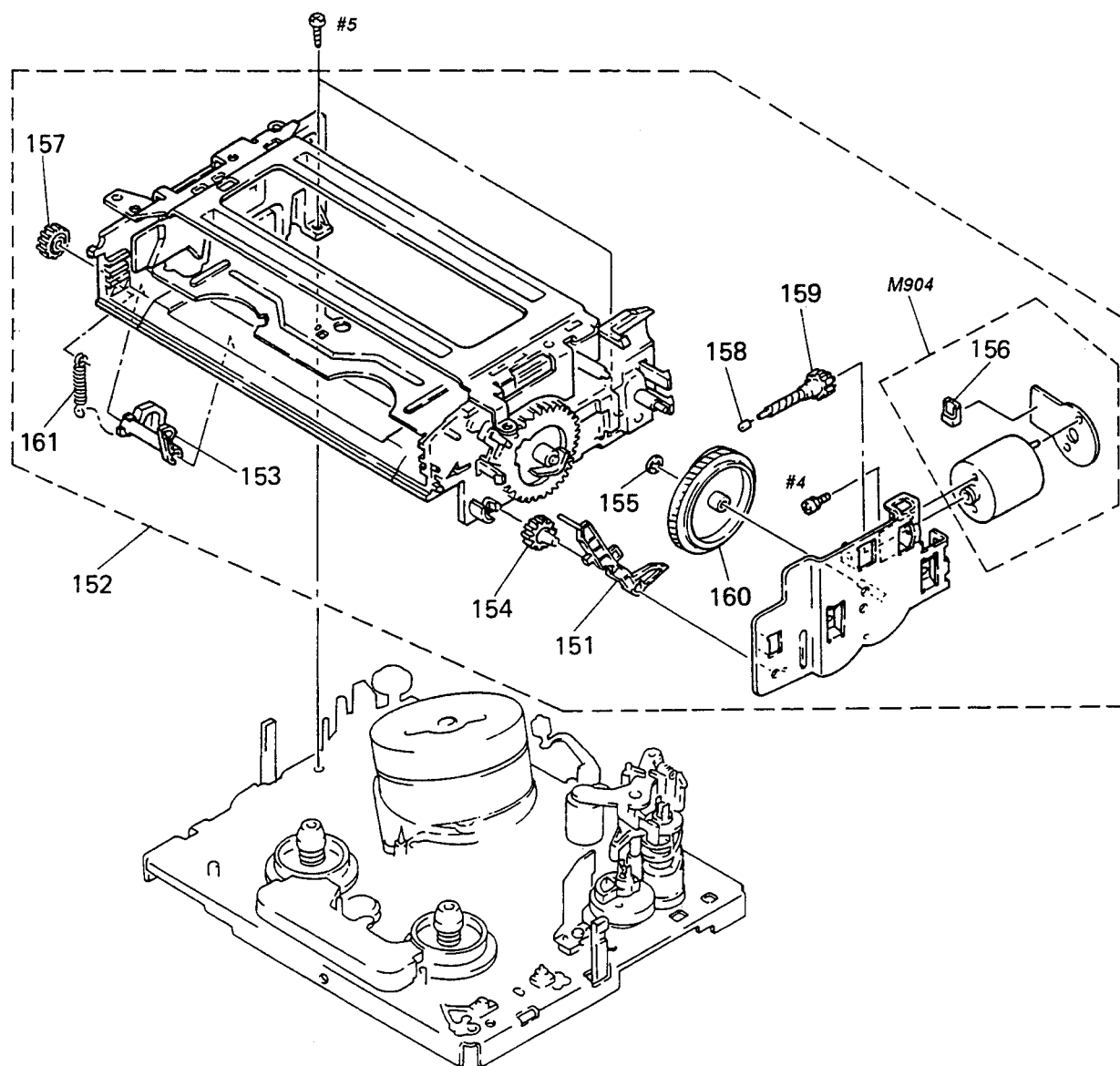
5-2. MAIN BOARD AND POWER BLOCK ASSEMBLIES



Ref.No.	Part No.	Description	Remark
* 51	A-6756-884-A	MA-144 BOARD, COMPLETE (E7:AE, NC)	
* 51	A-6756-886-A	MA-144 BOARD, COMPLETE (E7UY/E7:UB)	
* 51	A-6756-888-A	MA-144 BOARD, COMPLETE (E7:NP)	
* 51	A-6756-894-A	MA-144 BOARD, COMPLETE (E7:VP)	
* 51	A-6756-896-A	MA-144 BOARD, COMPLETE (E7:B)	
* 51	A-6756-954-A	MA-144 BOARD, COMPLETE (E8UV)	
* 51	A-6756-955-A	MA-144 BOARD, COMPLETE (E7:AP)	
* 52	A-6713-496-A	HF-27 BOARD, COMPLETE (E7UY/E7:AE, AP, B, NC, NP, UB/E8UV)	
* 52	A-6713-497-A	HF-27 BOARD, COMPLETE (E7:VP)	
53	X-3746-004-1	GROUND ASSY, SHAFT	
* 54	A-6727-471-A	RP-163 BOARD, COMPLETE	
Δ 55	1-413-789-11	POWER BLOCK (E7:AE, AP, B, NC, NP, VP)	
Δ 55	1-413-790-11	POWER BLOCK (E7UY/E7:UB/E8UV)	
56	3-951-085-01	HOLDER (NICAM), FRAME (E7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)	
56	3-951-118-01	HOLDER, FRAME (E7:B)	
* 57	A-6754-470-A	TU-136 BOARD, COMPLETE (E7:AE, AP, VP)	
* 57	A-6754-473-A	TU-136 BOARD, COMPLETE (E7UY/E7:UB/E8UV)	
* 57	A-6754-475-A	TU-136 BOARD, COMPLETE (E7:NC, NP)	

Ref.No.	Part No.	Description	Remark
* 59	3-946-836-41	PLATE, ORNAMENTAL, JACK (E7UY/E7:AE, AP, NC, UB, VP/E8UV)	
* 59	3-946-836-51	PLATE, ORNAMENTAL, JACK (E7:NP)	
* 59	3-946-836-61	PLATE, ORNAMENTAL, JACK (E7:B)	
60	1-555-110-00	CABLE, PIN (E7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)	
61	3-736-055-01	SCREW (3X8), TAPPING	
62	3-741-948-01	SCREW (3), SPECIAL (+) TAPPING	
63	3-682-057-11	SPACER (SMALL)	
64	4-309-753-00	HOLDER, WIR (E7:B, NC, NP, UB, VP)	
* 65	A-6756-882-A	GR-10 BOARD, COMPLETE	
66	3-749-677-01	RETAINER (LEFT), MD	
68	3-749-676-01	BRACKET, RF	
69	3-703-150-11	STOPPER, WIRING	
70	3-741-992-01	STOPPER, UPPER CASE	
* 71	1-647-376-11	PJ-57 BOARD	
72	1-646-744-13	CP-61 BOARD, COMPLETE (E7:B, NP)	
* 73	A-6754-476-A	VP-32 BOARD, COMPLETE (E7:VP)	
* 73	A-6755-956-A	PD-37 BOARD, COMPLETE (E7:AP/E8UV)	
* 74	3-951-647-01	PLATE, GROUND, TU (E7:VP)	

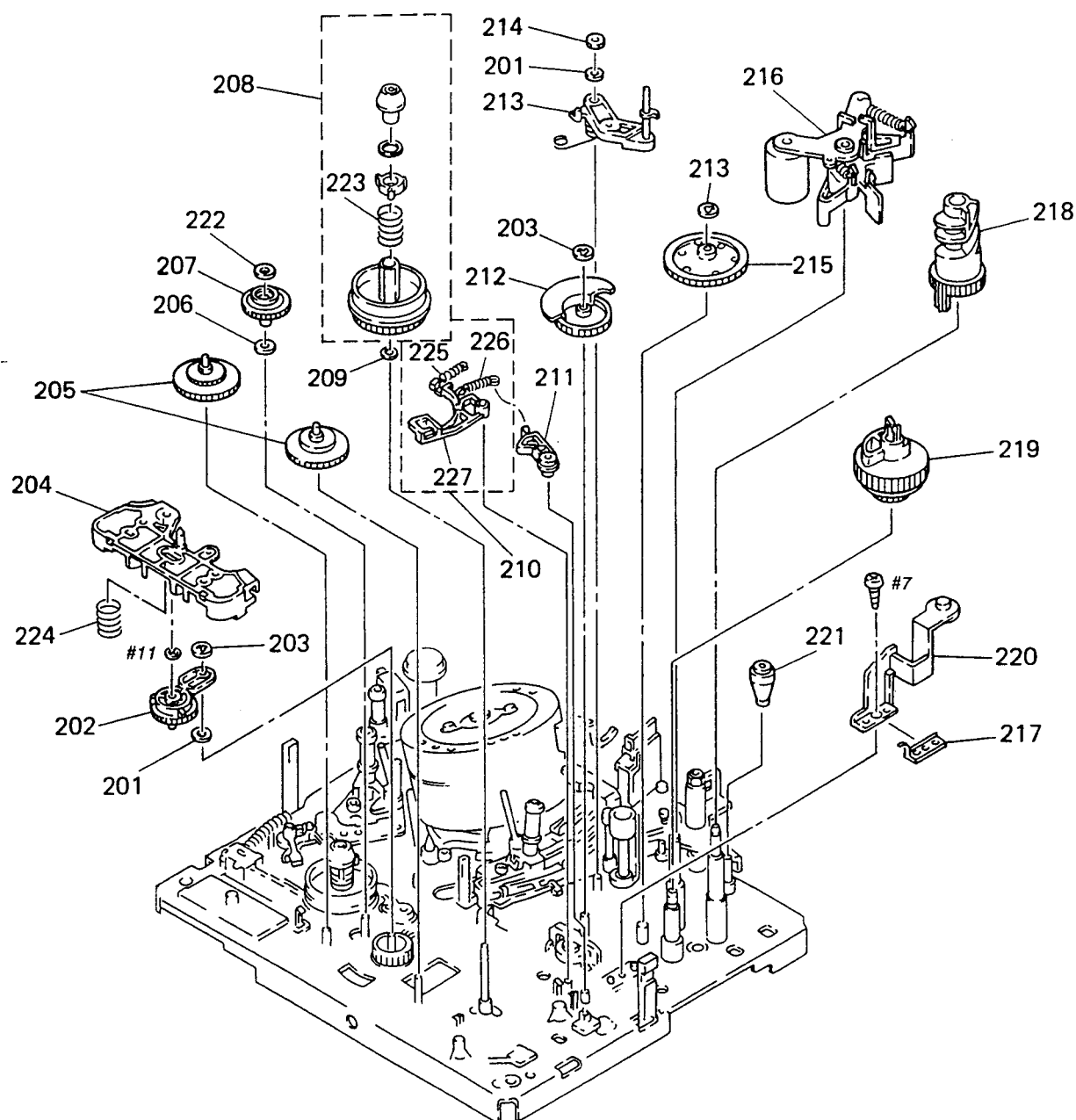
5-3. FL CASSETTE COMPARTMENT ASSEMBLY



Ref. No.	Part No.	Description	Remark
151	3-741-935-06	LEVER, FLAT DOOR	
152	A-6751-421-A	FL BLOCK ASSY (M2)	
153	3-736-163-01	LEVER, ERASING PROTECTION	
154	X-3727-775-2	GEAR (RIGHT) ASSY, MIDWAY	
155	3-696-510-01	WASHER (3), STOPPER	
156	1-506-482-11	PIN, CONNECTOR 3P	

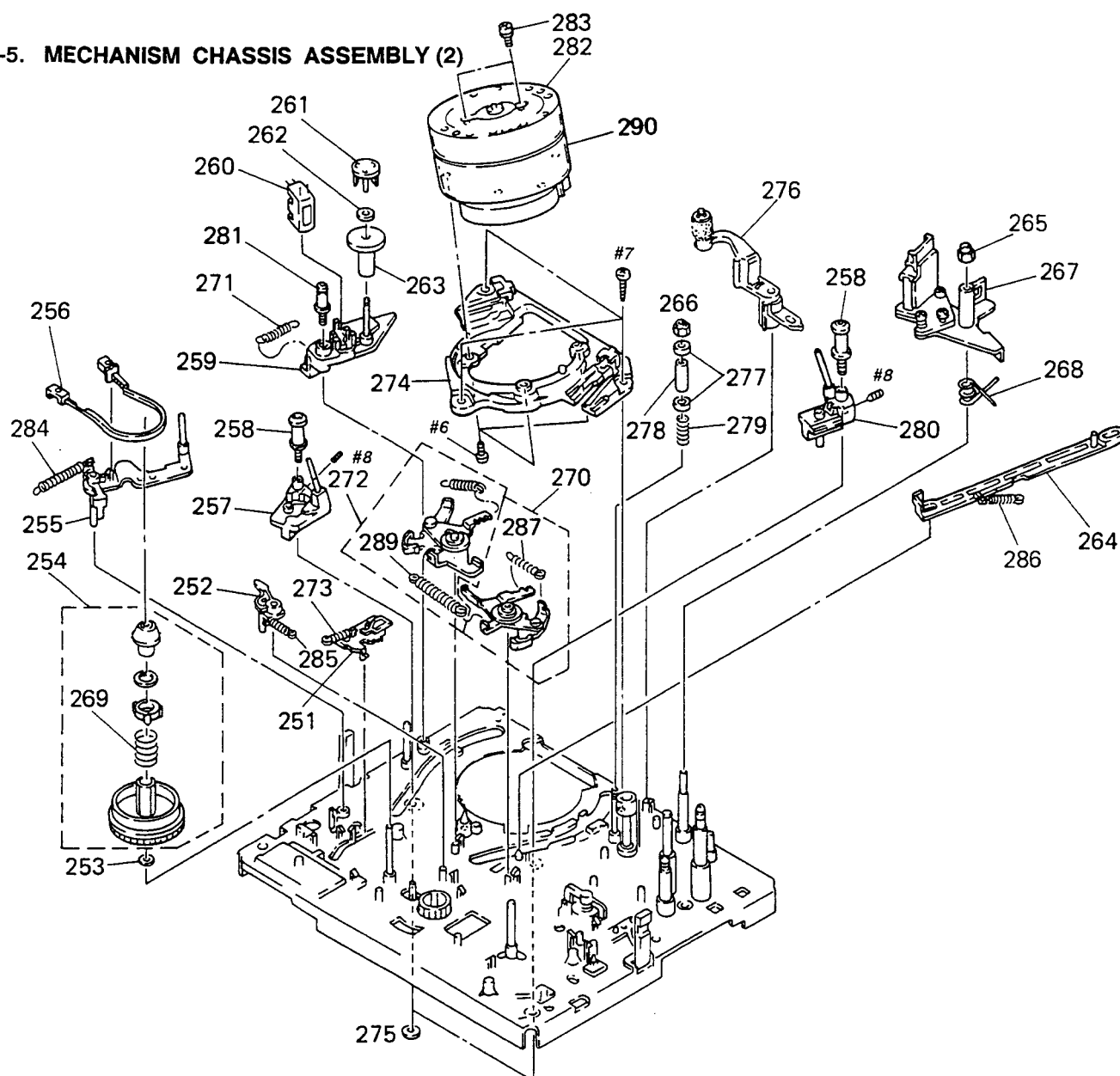
Ref. No.	Part No.	Description	Remark
157	3-736-044-02	GEAR (LEFT), MIDWAY	
158	3-716-144-02	RETAINER, WORM	
159	3-736-100-01	GEAR (FL), WORM	
160	3-736-164-01	WHEEL (FL), WORM	
161	3-739-687-01	SPRING, TENSION	
M904	X-3727-784-1	MOTOR ASSY	

5-4. MECHANISM CHASSIS ASSEMBLY (1)



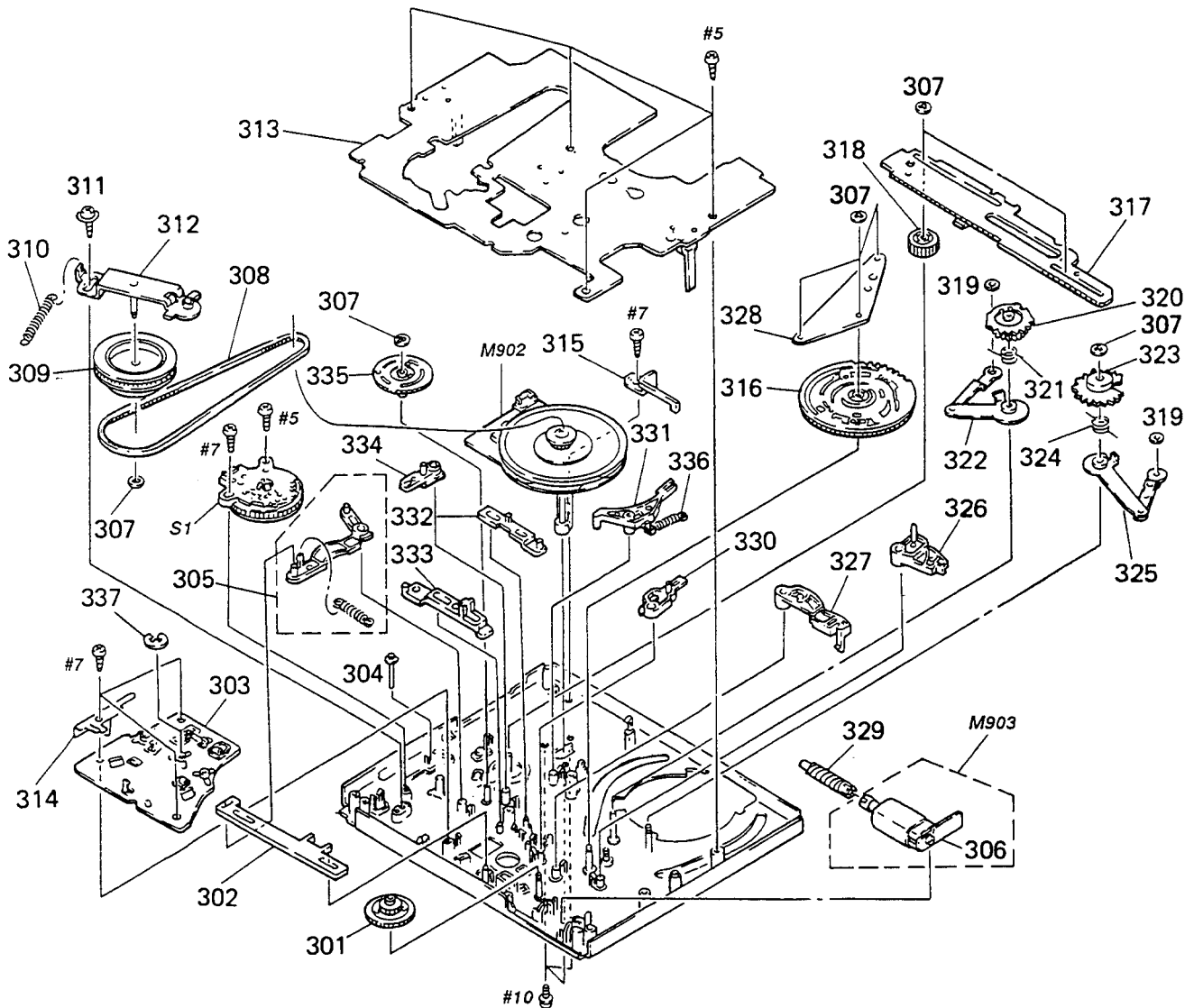
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-701-438-11	WASHER, 2.5		215	3-736-116-01	GEAR, COMMUNICATION	
202	X-3727-776-1	ARM ASSY, PENDULUM		216	X-3727-770-1	PINCH ROLLER BLOCK ASSY	
203	3-669-595-00	WASHER (2), STOPPER		217	3-942-829-01	SPRING (2) (ATOM), GROUND, FL	
204	3-736-172-02	RELEASE, LOCK, REEL		218	3-952-182-01	CAM, ELEVATOR	
205	X-3727-795-1	GEAR ASSY, RELAY		219	3-943-700-01	GEAR, PRESS CAM	
206	3-736-074-01	RETAINER (SMALL), THRUST		220	3-942-828-01	OPENER, LID	
207	3-736-037-01	GEAR, REV		221	3-738-250-01	SCREW, AC ADJUSTMENT	
208	X-3727-798-1	TABLE ASSY, REEL		222	3-736-069-01	RETAINER, SPRING	
209	3-738-212-21	RETAINER, THRUST, REEL TABLE		223	3-739-621-01	SPRING, COMPRESSION	
210	X-3733-335-1	BRAKE ASSY (AT), T SOFT		224	3-736-020-11	SPRING, COMPRESSION	
211	3-736-105-01	ARM, REV BRAKE		225	3-736-024-01	SPRING, TENSION	
212	3-736-143-01	GEAR, RVS CAM		226	3-736-025-01	SPRING (REV BRAKE), TENSION	
213	X-3942-218-1	ARM ASSY, RVS		227	3-736-075-01	BRAKE, S SOFT	
214	3-736-740-01	NUT (M2X0.25), NYLON					

5-5. MECHANISM CHASSIS ASSEMBLY (2)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	A-6759-483-A	TAKE-UP BLOCK ASSY, S		271	3-736-745-01	SPRING, TENSION	
252	X-3727-773-1	ARM ASSY (S), S SOFT BRAKE		272	X-3733-336-2	BRAKE ASSY (2) (AT), S	
253	3-738-212-21	RETAINER, THRUST, REEL TABLE		273	3-738-284-01	SPRING, TENSION	
254	X-3941-194-1	TABLE ASSY, REEL, S		274	X-3746-005-1	BASE ASSY (G), DRUM	
255	3-736-151-11	ARM (POM), TENSION REGULATOR		275	3-736-073-01	SLIDER, POLYETHYLENE	
256	X-3727-797-1	BAND ASSY, TENSION REGULATOR		276	A-6747-267-A	ARM BLOCK ASSY (S), C ROLLER	
257	X-3727-786-1	SHUTTLE (LEFT) ASSY		277	3-944-033-01	FLANGE, 7 GUIDE	
258	X-3733-301-1	ROLLER ASSY, GUIDE		278	3-736-730-01	SLEEVE, #7 GUIDE	
259	X-3727-767-1	BASE ASSY, STABILIZER		279	3-749-099-01	SPRING (#7 GUIDE), COMPRESSION	
260	1-543-647-11	HEAD, FE		280	X-3727-787-1	SHUTTLE (RIGHT) ASSY	
261	3-736-082-01	RETAINER, TS THRUST		281	X-3727-788-1	ROLLER ASSY, GUIDE, #2	
262	3-741-925-01	RING, RETAINING		282	1-550-872-11	DRUM ASSY, ROTARY UPPER (DZR-60-R)	
263	X-3727-771-1	STABILIZER ASSY, TAPE		283	2-643-205-01	SCREW (PSW) 3X8	
264	X-3743-517-1	LEVER ASSY, RELEASE, C ROLLER		284	3-733-389-11	SPRING, TENSION	
265	3-942-867-01	NUT, AC HEIGHT ADJUSTMENT		285	3-736-047-01	SPRING (S SOFT), TENSION	
266	3-942-866-01	NUT (M3) (3X0.5), NYLON		286	3-736-735-03	SPRING, TENSION	
267	A-6761-129-A	HEAD BLOCK ASSY, ACE		287	3-738-220-01	SPRING (MAIN BRAKE 2), TENSION	
268	3-944-833-01	SPRING, TORSION		289	3-738-221-01	SPRING (MAIN BRAKE 1), TENSION	
269	3-739-621-01	SPRING, COMPRESSION		290	1-550-873-11	DRUM ASSY, ROTARY BOTTOM (DZL-60A-R)	
270	X-3729-926-1	BRAKE ASSY (2), T					

5-6. MECHANISM CHASSIS ASSEMBLY (3)



Ref. No.	Part No.	Description	Remark
301	3-736-015-01	WHEEL (CAM), WORM	
302	3-736-158-01	PLATE, SLIDE, PENDULUM	
303	A-6739-084-A	CHASSIS BLOCK ASSY, SUB	
304	3-736-091-01	PIN, SWITCH	
305	X-3729-924-1	ARM ASSY, PENDULUM FUNCTION	
* 306	1-633-460-11	PC BOARD, CA-41	
307	3-669-595-00	WASHER (2), STOPPER	
308	3-736-013-01	BELT, TIMING	
309	X-3727-782-1	PULLEY ASSY	
310	3-736-089-01	SPRING, TENSION	
311	3-733-386-01	SCREW (3X8), WASHER	
312	X-3727-761-1	ARM ASSY, ADJUSTMENT	
* 313	A-6754-472-A	MD-56 BOARD, COMPLETE	
314	3-741-950-01	SPRING (AT), LEAF, SC GROUND	
315	3-736-744-01	RETAINER, ROTOR	
316	3-736-176-01	GEAR, CAM	
317	3-736-177-01	PLATE, SLIDE, MODE	
318	3-733-394-01	GEAR, RVS RELAY	
319	3-736-073-01	SLIDER, POLYETHYLENE	
320	3-736-148-01	GEAR (RIGHT), THREADING	

Ref. No.	Part No.	Description	Remark
321	3-736-092-01	SPRING (RIGHT), TORSION	
322	X-3727-777-1	ARM (RIGHT) ASSY, LOADING	
323	3-736-147-01	GEAR (LEFT), THREADING	
324	3-736-040-01	SPRING (LEFT), TORSION	
325	X-3727-778-1	ARM (LEFT) ASSY, LOADING	
326	3-736-142-01	ARM, TENSION REGULATOR FUNCTION	
327	3-736-140-01	ARM, S TAKE-UP	
328	3-733-396-01	HOLDER, CAM GEAR	
329	3-733-395-01	GEAR (CAM), WORM	
330	3-733-397-01	ARM, BRAKE FUNCTION	
331	X-3733-338-1	BRAKE ASSY (AT), CAP	
332	3-733-398-01	PLATE, SLIDE, BRAKE	
333	3-736-103-01	PLATE, SLIDE, LIMITER	
334	3-736-016-01	ARM, LIMITER FUNCTION	
335	3-736-170-01	GEAR, RKB CAM	
336	3-738-237-01	SPRING (CAP BRAKE), TENSION	
337	3-669-465-00	WASHER (1.5), STOPPER	
M902	8-835-489-01	MOTOR, DC U-26K	
M903	X-3733-302-1	MOTOR ASSY, CAM	
S1	1-692-062-11	SWITCH, ROTARY	

SECTION 6

ELECTRICAL PARTS LIST

GR-10

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
 - In each case, $u:\mu$, for example:
 $uA::\mu A..$ $uPA::\mu PA..$
 $uPB::\mu PB..$ $uPC::\mu PC..$ $uPD::\mu PD..$
- CAPACITORS
 - $uF:\mu F$
- COILS
 - $uH:\mu H$

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark
CP-61 BOARD (E7:B, NP)			

< CONNECTOR >			
CN251	1-691-909-11	SOCKET, CONNECTOR 8P (E7:B, NP)	
* CN252	1-691-621-11	SOCKET, CONNECTOR 9P (E7:B, NP)	
< JACK >			
CNJ251	1-561-534-41	SOCKET, PIN 21P (E7:B, NP) (CANAL PLUS)	
< JUMPER RESISTOR >			
JR251	1-216-295-00	METAL CHIP	0 5% 1/10W (E7:B, NP)
JR252	1-216-295-00	METAL CHIP	0 5% 1/10W (E7:B, NP)

*	A-6756-882-A GR-10 BOARD, COMPLETE		

< CAPACITOR >			
C101	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C107	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C108	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C110	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C133	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C137	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C138	1-124-589-11	ELECT	47uF 20% 16V
C139	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C143	1-165-319-11	CERAMIC CHIP	0.1uF 50V
< CONNECTOR >			
CN101	1-569-338-11	CONNECTOR, BOARD TO BOARD 19P	
CN102	1-506-490-21	PIN, CONNECTOR 11P	
* CN103	1-564-018-51	PIN, CONNECTOR 8P	

Ref. No.	Part No.	Description	Remark		
< IC >					
IC103	8-759-097-80	IC HD49783FP-T1			
< JUMPER RESISTOR >					
JR101	1-216-296-00	METAL CHIP	0	5%	1/8W
JR102	1-216-295-00	METAL CHIP	0	5%	1/10W
< COIL >					
L114	1-410-521-11	INDUCTOR 100uH			
< TRANSISTOR >					
Q102	8-729-424-18	TRANSISTOR UN2113			
Q120	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q121	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q126	8-729-424-18	TRANSISTOR UN2113			
Q127	8-729-421-19	TRANSISTOR UN2213			
Q139	8-729-421-19	TRANSISTOR UN2213			
< RESISTOR >					
R102	1-216-073-00	METAL CHIP	10K	5%	1/10W
R103	1-216-295-00	METAL CHIP	0	5%	1/10W
R104	1-216-049-00	METAL CHIP	1K	5%	1/10W
R105	1-216-049-00	METAL CHIP	1K	5%	1/10W
R106	1-216-049-00	METAL CHIP	1K	5%	1/10W
R107	1-216-049-00	METAL CHIP	1K	5%	1/10W
R108	1-216-049-00	METAL CHIP	1K	5%	1/10W
R147	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R148	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R149	1-216-045-00	METAL CHIP	680	5%	1/10W
R150	1-216-043-00	METAL CHIP	560	5%	1/10W
R151	1-216-049-00	METAL CHIP	1K	5%	1/10W
R152	1-216-049-00	METAL CHIP	1K	5%	1/10W
R153	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R154	1-216-069-00	METAL CHIP	6.8K	5%	1/10W

GR-10

HF-27

Ref. No.	Part No.	Description	Remark		
R155	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R156	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R157	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R158	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R159	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R160	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R162	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R165	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R166	1-216-083-00	METAL CHIP	27K	5%	1/10W

* A-6713-496-A HF-27 BOARD, COMPLETE
(ER7UY/E7:AE, AP, B, NC, NP, UB/E8UV)

* A-6713-497-A HF-27 BOARD, COMPLETE (E7:VP)

< CAPACITOR >

C201	1-123-382-00	ELECT	3.3uF	20%	100V
C202	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C203	1-124-916-11	ELECT	22uF	20%	63V
C204	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C205	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C206	1-137-367-11	FILM	0.0033uF	5%	50V
C207	1-137-370-11	FILM	0.01uF	5%	50V
C208	1-124-126-00	ELECT	47uF	20%	10V
C209	1-137-372-11	FILM	0.022uF	5%	50V
C210	1-124-927-11	ELECT	4.7uF	20%	100V
C211	1-124-907-11	ELECT	10uF	20%	50V
C212	1-124-916-11	ELECT	22uF	20%	63V
C213	1-124-126-00	ELECT	47uF	20%	10V
C214	1-124-903-11	ELECT	1uF	20%	50V
C215	1-124-907-11	ELECT	10uF	20%	50V
C216	1-137-370-11	FILM	0.01uF	5%	50V
C218	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C219	1-164-699-11	CERAMIC CHIP	0.0033uF	5%	50V
C220	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C221	1-163-986-00	CERAMIC CHIP	0.027uF	10%	25V
C223	1-123-382-00	ELECT	3.3uF	20%	100V
C224	1-123-382-00	ELECT	3.3uF	20%	100V
C225	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C227	1-137-364-91	FILM	0.001uF	5%	50V
C228	1-124-903-11	ELECT	1uF	20%	50V
C229	1-124-443-00	ELECT	100uF	20%	10V
C230	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C231	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C232	1-123-382-00	ELECT	3.3uF	20%	100V
C233	1-163-007-11	CERAMIC CHIP	680PF	10%	50V

Ref. No.	Part No.	Description	Remark		
C234	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C235	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C236	1-137-367-11	FILM	0.0033uF	5%	50V
C237	1-137-370-11	FILM	0.01uF	5%	50V
C238	1-124-126-00	ELECT	47uF	20%	10V
C239	1-137-372-11	FILM	0.022uF	5%	50V
C240	1-124-927-11	ELECT	4.7uF	20%	100V
C241	1-124-907-11	ELECT	10uF	20%	50V
C243	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C244	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C245	1-124-443-00	ELECT	100uF	20%	10V
C246	1-124-034-51	ELECT	33uF	20%	16V
C247	1-124-034-51	ELECT	33uF	20%	16V
C248	1-124-443-00	ELECT	100uF	20%	10V
C249	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C250	1-124-126-00	ELECT	47uF	20%	10V
C251	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C252	1-124-916-11	ELECT	22uF	20%	63V
C253	1-123-382-00	ELECT	3.3uF	20%	100V

< CONNECTOR >

CN201	1-695-938-11	CONNECTOR, BOARD TO BOARD 18P
CN202	1-695-938-11	CONNECTOR, BOARD TO BOARD 18P
CN203	1-695-938-11	CONNECTOR, BOARD TO BOARD 18P

< DIODE >

D201	8-719-404-46	DIODE MA110
D202	8-719-404-46	DIODE MA110
D203	8-719-400-18	DIODE MA152WK
D204	8-719-404-46	DIODE MA110

< IC >

IC201	8-759-160-54	IC XLH7772KS-VP
IC204	8-759-089-84	IC BA7755AF-T1

< COIL >

L201	1-410-071-11	INDUCTOR 10mH
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< TRANSISTOR >

Q201	8-729-808-01	TRANSISTOR 2SD1622-S
Q202	8-729-141-83	TRANSISTOR 2SA473
Q203	8-729-424-18	TRANSISTOR UN2113
Q206	8-729-424-18	TRANSISTOR UN2113
Q208	8-729-421-19	TRANSISTOR UN2213

< RESISTOR >

R201	1-216-677-11	METAL CHIP	12K	0.5%	1/10W
R202	1-216-085-00	METAL CHIP	33K	5%	1/10W
R203	1-216-105-00	METAL CHIP	220K	5%	1/10W

HF-27

MA-144

Ref. No.	Part No.	Description	Remark		
R204	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R205	1-216-049-00	METAL CHIP	1K	5%	1/10W
R206	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R207	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R208	1-216-033-00	METAL CHIP	220	5%	1/10W
R209	1-216-109-00	METAL CHIP	330K	5%	1/10W
R210	1-216-073-00	METAL CHIP	10K	5%	1/10W
R211	1-216-035-00	METAL CHIP	270	5%	1/10W
R212	1-216-049-00	METAL CHIP	1K	5%	1/10W
R213	1-216-083-00	METAL CHIP	27K	5%	1/10W
R215	1-216-049-00	METAL CHIP	1K	5%	1/10W
R216	1-216-073-00	METAL CHIP	10K	5%	1/10W
R217	1-216-095-00	METAL CHIP	82K	5%	1/10W
R218	1-216-097-00	METAL CHIP	100K	5%	1/10W
R219	1-216-097-00	METAL CHIP	100K	5%	1/10W
R220	1-216-097-00	METAL CHIP	100K	5%	1/10W
R221	1-216-097-00	METAL CHIP	100K	5%	1/10W
R223	1-216-097-00	METAL CHIP	100K	5%	1/10W
R227	1-216-085-00	METAL CHIP	33K	5%	1/10W
R228	1-216-295-00	METAL CHIP	0	5%	1/10W
R229	1-216-073-00	METAL CHIP	10K	5%	1/10W
R230	1-216-073-00	METAL CHIP	10K	5%	1/10W
R231	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R232	1-216-085-00	METAL CHIP	33K	5%	1/10W
R234	1-216-077-00	METAL CHIP	15K	5%	1/10W
R235	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R236	1-216-109-00	METAL CHIP	330K	5%	1/10W
R237	1-216-081-00	METAL CHIP	22K	5%	1/10W
R238	1-216-073-00	METAL CHIP	10K	5%	1/10W
R239	1-216-680-11	METAL CHIP	16K	0.5%	1/10W
R240	1-216-085-00	METAL CHIP	33K	5%	1/10W
R241	1-216-105-00	METAL CHIP	220K	5%	1/10W
R243	1-216-081-00	METAL CHIP	22K	5%	1/10W
R244	1-216-085-00	METAL CHIP	33K	5%	1/10W
R245	1-216-081-00	METAL CHIP	22K	5%	1/10W(E7:VP)
R246	1-216-085-00	METAL CHIP	33K	5%	1/10W
R247	1-216-083-00	METAL CHIP	27K	5%	1/10W
R248	1-216-085-00	METAL CHIP	33K	5%	1/10W
R249	1-216-083-00	METAL CHIP	27K	5%	1/10W
R250	1-216-085-00	METAL CHIP	33K	5%	1/10W
R251	1-216-081-00	METAL CHIP	22K	5%	1/10W
R252	1-216-081-00	METAL CHIP	22K	5%	1/10W
R253	1-216-081-00	METAL CHIP	22K	5%	1/10W
R254	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R255	1-216-085-00	METAL CHIP	33K	5%	1/10W
R258	1-216-067-00	METAL CHIP	5.6K	5%	1/10W(E7:VP)
R259	1-216-067-00	METAL CHIP	5.6K	5%	1/10W(E7:VP)
R261	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R267	1-216-097-00	METAL CHIP	100K	5%	1/10W

Ref. No.	Part No.	Description	Remark		
R268	1-216-091-00	METAL CHIP	56K	5%	1/10W
R269	1-216-295-00	METAL CHIP	0	5%	1/10W
R270	1-216-049-00	METAL CHIP	1K	5%	1/10W
R271	1-216-295-00	METAL CHIP	0	5%	1/10W
R297	1-216-099-00	METAL CHIP	120K	5%	1/10W
R298	1-247-889-00	CARBON	270K	5%	1/4W
R299	1-247-889-00	CARBON	270K	5%	1/4W

< VARIABLE RESISTOR >

RV202	1-241-763-11	RES. ADJ. CERMET 4.7K
RV203	1-241-631-11	RES. ADJ. CARBON 22K
RV204	1-241-764-11	RES. ADJ. CERMET 10K
RV206	1-241-763-11	RES. ADJ. CERMET 4.7K
RV207	1-241-631-11	RES. ADJ. CARBON 22K

*	A-6756-884-A	MA-144 BOARD, COMPLETE (E7:AE,NC)	*****		
*	A-6756-955-A	MA-144 BOARD, COMPLETE (E7:AP)	*****		
*	A-6756-896-A	MA-144 BOARD, COMPLETE (E7:B)	*****		
*	A-6756-888-A	MA-144 BOARD, COMPLETE (E7:NP)	*****		
*	A-6756-886-A	MA-144 BOARD, COMPLETE (E7:UY/E7:UB)	*****		
*	A-6756-894-A	MA-144 BOARD, COMPLETE (E7:VP)	*****		
*	A-6756-954-A	MA-144 BOARD, COMPLETE (E8UV)	*****		

1-558-924-21	CABLE, PIN (E7:B)
3-951-893-01	HEAT SINK
7-685-646-79	SCREW +BVTP 3X8 TYPE2

< CAPACITOR >

C101	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C102	1-124-126-00	ELECT	47uF	20%	10V
C103	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C104	1-124-916-11	ELECT	22uF	20%	63V
C105	1-124-443-00	ELECT	100uF	20%	10V
C106	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C107	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-124-925-11	ELECT	2.2uF	20%	100V
C111	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C112	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C113	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C114	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C115	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C116	1-163-031-11	CERAMIC CHIP	0.01uF		50V

Ref.No.	Part No.	Description	Remark		
C117	1-124-925-11	ELECT	2. 2uF	20%	100V
C118	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C119	1-124-916-11	ELECT	22uF	20%	63V
C131	1-124-477-11	ELECT	47uF	20%	25V
C132	1-124-584-00	ELECT	100uF	20%	10V
(E7UY/E7:AE, AP, B, NC, UB, VP/E8UV)					
C135	1-124-477-11	ELECT	47uF	20%	25V
C136	1-126-101-11	ELECT	100uF	20%	16V
C140	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C141	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C142	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C143	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C145	1-162-306-11	CERAMIC	0. 01uF	20%	16V(E7:VP)
C201	1-162-306-11	CERAMIC	0. 01uF	20%	16V
C203	1-126-101-11	ELECT	100uF	20%	16V
C204	1-130-495-00	MYLAR	0. 1uF	5%	50V
C205	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C206	1-124-916-11	ELECT	22uF	20%	63V
C207	1-130-487-00	MYLAR	0. 022uF	5%	50V
C208	1-124-925-11	ELECT	2. 2uF	20%	100V
C209	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C210	1-124-443-00	ELECT	100uF	20%	10V
C211	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C212	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C213	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C214	1-163-009-11	CERAMIC CHIP	0. 001uF	10%	50V
C215	1-163-989-11	CERAMIC CHIP	0. 033uF	10%	25V
C304	1-163-105-00	CERAMIC CHIP	33PF	5%	50V (E7:B, VP)
C305	1-163-107-00	CERAMIC CHIP	39PF	5%	50V (E7:B, VP)
C306	1-124-126-00	ELECT	47uF	20%	10V
C307	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C308	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C309	1-124-126-00	ELECT	47uF	20%	10V
C310	1-163-227-11	CERAMIC CHIP	10PF	0. 5PF	50V
C311	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C312	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C313	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C316	1-124-925-11	ELECT	2. 2uF	20%	100V
C317	1-164-343-11	CERAMIC CHIP	0. 056uF	10%	25V
C318	1-163-037-11	CERAMIC CHIP	0. 022uF	10%	25V
C319	1-124-126-00	ELECT	47uF	20%	10V
C320	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C321	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C322	1-124-903-11	ELECT	1uF	20%	50V
C323	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C324	1-124-126-00	ELECT	47uF	20%	10V
C325	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C326	1-124-126-00	ELECT	47uF	20%	10V
C327	1-163-009-11	CERAMIC CHIP	0. 001uF	10%	50V

Ref.No.	Part No.	Description	Remark		
C340	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C504	1-163-121-00	CERAMIC CHIP	150PF	5%	50V (E7:B, NP)
C506	1-163-121-00	CERAMIC CHIP	150PF	5%	50V (E7:B, NP)
C508	1-163-009-11	CERAMIC CHIP	0. 001uF	10%	50V (E7:B, NP)
C510	1-163-009-11	CERAMIC CHIP	0. 001uF	10%	50V (E7:B, NP)
C516	1-124-126-00	ELECT	47uF	20%	10V (E7:B, NP)
C517	1-124-126-00	ELECT	47uF	20%	10V (E7:B, NP)
C518	1-124-126-00	ELECT	47uF	20%	10V (E7:B, NP)
C519	1-124-126-00	ELECT	47uF	20%	10V (E7:B, NP)
C601	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C602	1-163-125-00	CERAMIC CHIP	220PF	5%	50V (E7:B, VP)
C603	1-163-117-00	CERAMIC CHIP	100PF	5%	50V (E7:B, VP)
C603	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
(E7UY/E7:AE, AP, NC, NP, UB/E8UV)					
C604	1-124-589-11	ELECT	47uF	20%	16V
C605	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C606	1-162-306-11	CERAMIC	0. 01uF	20%	16V
C607	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C609	1-162-306-11	CERAMIC	0. 01uF	20%	16V
C610	1-124-589-11	ELECT	47uF	20%	16V
C612	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C613	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C614	1-124-589-11	ELECT	47uF	20%	16V
C615	1-163-033-00	CERAMIC CHIP	0. 022uF	50V	(E7:B)
C616	1-163-129-00	CERAMIC CHIP	330PF	5%	50V (E7:B)
C617	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C618	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C619	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C620	1-163-227-11	CERAMIC CHIP	10PF	0. 5PF	50V
C621	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C623	1-124-126-00	ELECT	47uF	20%	10V
C624	1-124-589-11	ELECT	47uF	20%	16V (E7:B)
C625	1-124-589-11	ELECT	47uF	20%	16V (E7:B)
C626	1-124-907-11	ELECT	10uF	20%	50V
C627	1-124-126-00	ELECT	47uF	20%	10V
C628	1-124-126-00	ELECT	47uF	20%	10V (E7:B, VP)
C629	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C630	1-163-091-00	CERAMIC CHIP	8PF		50V
C651	1-124-907-11	ELECT	10uF	20%	50V
C652	1-124-907-11	ELECT	10uF	20%	50V
C653	1-124-907-11	ELECT	10uF	20%	50V
C654	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
(E7UY/E7:AE, AP, B, NC, NP, UB/E8UV)					
C690	1-101-888-00	CERAMIC	68PF	5%	50V (E7:VP)
C701	1-163-031-11	CERAMIC CHIP	0. 01uF		50V
C702	1-124-126-00	ELECT	47uF	20%	10V
C703	1-124-472-11	ELECT	470uF	20%	10V
C704	1-124-126-00	ELECT	47uF	20%	10V
C705	1-163-009-11	CERAMIC CHIP	0. 001uF	10%	50V

Ref. No.	Part No.	Description	Remark
C708	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C709	1-163-205-00	CERAMIC CHIP	0.001uF 5% 50V (E7:VP)
C711	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C713	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C714	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C716	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C804	1-124-916-11	ELECT	22uF 20% 63V (E7:B)
C808	1-163-031-11	CERAMIC CHIP	0.01uF 50V (E7:B)
C809	1-126-101-11	ELECT	100uF 20% 16V (E7:B)
C810	1-163-031-11	CERAMIC CHIP	0.01uF 50V (E7:B)
C811	1-124-927-11	ELECT	4.7uF 20% 100V (E7:B)
C812	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (E7:B)
C813	1-163-031-11	CERAMIC CHIP	0.01uF 50V (E7:B)
C814	1-124-126-00	ELECT	47uF 20% 10V (E7:B)
C817	1-164-161-11	CERAMIC CHIP	0.0022MF 10% 50V(E7:B)
C819	1-163-031-11	CERAMIC CHIP	0.01MF 50V(E7:B)
C820	1-124-126-00	ELECT	47uF 20% 10V (E7:B)
C826	1-124-907-11	ELECT	10uF 20% 50V (E7:B)
C852	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C853	1-164-232-11	CERAMIC CHIP	0.01uF 50V
C854	1-163-011-11	CERAMIC CHIP	0.0015uF 10% 50V
C855	1-163-011-11	CERAMIC CHIP	0.0015uF 10% 50V
C856	1-137-612-11	FILM	0.0068uF 5% 100V
C857	1-104-697-11	FILM	0.047uF 5% 100V
C858	1-104-695-11	FILM	330PF 5% 100V
C859	1-126-101-11	ELECT	100uF 20% 16V
C860	1-126-101-11	ELECT	100uF 20% 16V
C861	1-130-491-00	MYLAR	0.047uF 5% 50V

< CONNECTOR >

CJ701	1-695-935-11	CONNECTOR (SQUARE TYPE) 21P (EURO-AV(LINE 1))	
* CN032	1-565-439-11	PIN, CONNECTOR (PCB) 10P (E7:AP/E8UV)	
CN101	1-506-468-11	PIN, CONNECTOR 3P	
CN103	1-568-786-11	PIN, CONNECTOR 9P	
CN104	1-568-787-11	PIN, CONNECTOR 10P	
CN201	1-569-338-11	CONNECTOR, BOARD TO BOARD 19P	
CN202	1-569-338-11	CONNECTOR, BOARD TO BOARD 19P	
CN401	1-691-702-11	CONNECTOR, BOARD TO BOARD 20P	
CN402	1-691-702-11	CONNECTOR, BOARD TO BOARD 20P	
* CN501	1-691-908-11	SOCKET, CONNECTOR (E7:B, NP)	
* CN502	1-695-520-11	SOCKET, CONNECTOR 9P (E7:B, NP)	
CN601	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P	
* CN602	1-573-128-11	PIN, CONNECTOR 5P	
CN801	1-568-787-11	PIN, CONNECTOR 10P (E7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)	
CN802	1-568-788-21	PIN, CONNECTOR 11P (E7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)	
CN851	1-695-939-11	CONNECTOR, BOARD TO BOARD 18P	

Ref. No.	Part No.	Description	Remark
CN852	1-695-939-11	CONNECTOR, BOARD TO BOARD 18P	
CN853	1-695-939-11	CONNECTOR, BOARD TO BOARD 18P	
* CN854	1-560-892-00	PIN, CONNECTOR 4P	
* CN855	1-560-891-00	PIN, CONNECTOR 3P	
CN856	1-506-468-11	PIN, CONNECTOR 3P (E7UY/E7:AE, AP, NC, UB, VP/E8UV)	
* CN857	1-560-892-00	PIN, CONNECTOR 4P	
< DIODE >			
D101	8-719-200-76	DIODE 10E1N	
D102	8-719-200-76	DIODE 10E1N	
D103	8-719-911-19	DIODE 1SS119	
D104	8-719-911-19	DIODE 1SS119	
D131	8-719-801-48	DIODE 1SS193	
D201	8-719-108-24	DIODE 1SS223	
D202	8-719-109-74	DIODE RD4.3ES-B1	
D203	8-719-109-81	DIODE RD4.7ES-B2	
D204	8-719-200-82	DIODE 11ES2	
D206	8-719-801-48	DIODE 1SS193	
D207	8-719-108-24	DIODE 1SS223	
D301	8-719-200-82	DIODE 11ES2	
D302	8-719-801-48	DIODE 1SS193	
D501	8-719-109-96	DIODE RD6.8ES-B1 (E7:B, NP)	
D502	8-719-109-96	DIODE RD6.8ES-B1 (E7:B, NP)	
D503	8-719-109-96	DIODE RD6.8ES-B1 (E7:B, NP)	
D505	8-719-109-96	DIODE RD6.8ES-B1 (E7:B, NP)	
D506	8-719-110-36	DIODE RD13ES-B2 (E7:B, NP)	
D601	8-719-400-18	DIODE MA152WK (E7:B)	
D602	8-719-911-19	DIODE 1SS119 (E7:B)	
D603	8-719-911-19	DIODE 1SS119 (E7:VP)	
D604	8-719-911-19	DIODE 1SS119	
D605	8-719-911-19	DIODE 1SS119	
D701	8-719-109-96	DIODE RD6.8ES-B1	
D702	8-719-109-96	DIODE RD6.8ES-B1	
D703	8-719-108-12	DIODE RD9.1E-W	
D704	8-719-109-96	DIODE RD6.8ES-B1 (E7:B, NP)	
D705	8-719-110-36	DIODE RD13ES-B2	
D706	8-719-109-74	DIODE RD4.3ES-B1	
D707	8-719-109-96	DIODE RD6.8ES-B1	
D708	8-719-109-96	DIODE RD6.8ES-B1	
D709	8-719-109-96	DIODE RD6.8ES-B1	
D710	8-719-109-96	DIODE RD6.8ES-B1	
D801	8-719-110-78	DIODE RD33ES-B2 (E7:B)	
D802	8-719-800-76	DIODE 1SS226 (E7:B)	
D851	8-719-911-19	DIODE 1SS119 (E7:B, NP)	
D852	8-719-911-19	DIODE 1SS119 (E7:B, NP)	
D853	8-719-104-34	DIODE 1S2836 (E7:B, NP)	
D854	8-719-400-18	DIODE MA152WK (E7:B, NP)	

Ref. No.	Part No.	Description	Remark		
< DELAY LINE >					
DL601	1-415-728-31	DELAY LINE, 2H (ULTRASONIC)			
DL602	1-415-856-11	DELAY LINE, ULTRASONIC GLASS			
< IC >					
IC101	8-759-246-14	IC TA8823N			
IC131	8-759-513-73	IC PQ09RF11			
IC132	8-759-513-72	IC PQ12RF11			
IC201	8-759-983-45	IC BA6238A			
IC202	8-759-908-17	IC TL082CPS			
IC203	8-752-836-58	IC CXP80724-061Q			
IC204	8-759-970-89	IC BA10358F			
IC301	8-759-089-79	IC MB90085PF-129			
IC302	8-759-164-09	IC LA7218M-DE-R			
IC501	1-809-952-11	IC MODULE, CANAL PLUS BX8179 (E7:B, NP)			
IC601	1-809-957-11	IC H8B7220B			
IC602	1-809-959-11	IC TME656 (E7:B)			
IC603	1-809-958-11	IC BX8189 (E7:B, VP)			
IC605	8-759-511-44	IC LVA522SA			
< JUMPER RESISTOR >					
JR101	1-216-296-00	METAL CHIP	0	5%	1/8W
JR102	1-216-295-00	METAL CHIP	0	5%	1/10W
JR103	1-216-296-00	METAL CHIP	0	5%	1/8W
JR104	1-216-295-00	METAL CHIP	0	5%	1/10W
JR105	1-216-296-00	METAL CHIP	0	5%	1/8W
JR106	1-216-296-00	METAL CHIP	0	5%	1/8W
JR107	1-216-296-00	METAL CHIP	0	5%	1/8W
JR108	1-216-296-00	METAL CHIP	0	5%	1/8W
JR109	1-216-295-00	METAL CHIP	0	5%	1/10W
JR110	1-216-295-00	METAL CHIP	0	5%	1/10W
JR111	1-216-296-00	METAL CHIP	0	5%	1/8W
JR112	1-216-296-00	METAL CHIP	0	5%	1/8W
JR113	1-216-296-00	METAL CHIP	0	5%	1/8W
JR114	1-216-296-00	METAL CHIP	0	5%	1/8W
JR115	1-216-296-00	METAL CHIP	0	5%	1/8W
JR116	1-216-295-00	METAL CHIP	0	5%	1/10W
JR117	1-216-296-00	METAL CHIP	0	5%	1/8W
JR119	1-216-296-00	METAL CHIP	0	5%	1/8W
JR120	1-216-295-00	METAL CHIP	0	5%	1/10W
JR121	1-216-296-00	METAL CHIP	0	5%	1/8W
JR122	1-216-296-00	METAL CHIP	0	5%	1/8W
JR123	1-216-296-00	METAL CHIP	0	5%	1/8W
JR124	1-216-296-00	METAL CHIP	0	5%	1/8W
JR125	1-216-296-00	METAL CHIP	0	5%	1/8W
JR126	1-216-296-00	METAL CHIP	0	5%	1/8W
JR127	1-216-296-00	METAL CHIP	0	5%	1/8W
JR128	1-216-295-00	METAL CHIP	0	5%	1/10W

Ref. No.	Part No.	Description	Remark		
JR129	1-216-295-00	METAL CHIP	0	5%	1/10W
JR130	1-216-295-00	METAL CHIP	0	5%	1/10W
JR131	1-216-295-00	METAL CHIP	0	5%	1/10W
JR132	1-216-296-00	METAL CHIP	0	5%	1/8W
JR133	1-216-296-00	METAL CHIP	0	5%	1/8W
JR134	1-216-296-00	METAL CHIP	0	5%	1/8W
JR135	1-216-296-00	METAL CHIP	0	5%	1/8W
JR136	1-216-296-00	METAL CHIP	0	5%	1/8W
JR137	1-216-296-00	METAL CHIP	0	5%	1/8W
JR138	1-216-296-00	METAL CHIP	0	5%	1/8W
JR139	1-216-296-00	METAL CHIP	0	5%	1/8W
JR140	1-216-296-00	METAL CHIP	0	5%	1/8W
JR141	1-216-296-00	METAL CHIP	0	5%	1/8W
JR142	1-216-296-00	METAL CHIP	0	5%	1/8W
JR143	1-216-296-00	METAL CHIP	0	5%	1/8W
JR144	1-216-295-00	METAL CHIP	0	5%	1/10W
JR145	1-216-295-00	METAL CHIP	0	5%	1/10W
JR146	1-216-296-00	METAL CHIP	0	5%	1/8W
JR147	1-216-295-00	METAL CHIP	0	5%	1/10W
JR148	1-216-295-00	METAL CHIP	0	5%	1/10W
JR149	1-216-296-00	METAL CHIP	0	5%	1/8W
JR150	1-216-295-00	METAL CHIP	0	5%	1/10W
JR151	1-216-295-00	METAL CHIP	0	5%	1/10W
JR152	1-216-295-00	METAL CHIP	0	5%	1/10W
JR153	1-216-295-00	METAL CHIP	0	5%	1/10W
JR154	1-216-295-00	METAL CHIP	0	5%	1/10W
JR155	1-216-295-00	METAL CHIP	0	5%	1/10W
JR373	1-216-296-00	METAL CHIP	0	5%	1/8W
JR374	1-216-295-00	METAL CHIP	0	5%	1/10W
JR375	1-216-295-00	METAL CHIP	0	5%	1/10W
JR804	1-216-296-00	METAL CHIP	0	5%	1/8W (E7:B)
JR902	1-216-295-00	METAL CHIP	0	5%	1/10W (E7UY/E7:AE, AP, NC, UB, VP/E8UV)
JR903	1-216-296-00	METAL CHIP	0	5%	1/8W (E7UY/E7:AE, AP, NC, UB, VP/E8UV)
JR925	1-216-295-00	METAL CHIP	0	5%	1/10W (E7:B, NP)
JR927	1-216-295-00	METAL CHIP	0	5%	1/10W (E7:B, NP)
JR929	1-216-295-00	METAL CHIP	0	5%	1/10W (E7:B, NP)
JR930	1-216-295-00	METAL CHIP	0	5%	1/10W (E7:B, NP)
JR933	1-216-295-00	METAL CHIP	0	5%	1/10W
JR936	1-216-295-00	METAL CHIP	0	5%	1/10W
JR938	1-216-295-00	METAL CHIP	0	5%	1/10W
JR941	1-216-295-00	METAL CHIP	0	5%	1/10W
JR944	1-216-296-00	METAL CHIP	0	5%	1/8W (E7:AP, VP/E8UV)
JR946	1-216-296-00	METAL CHIP	0	5%	1/8W (E7:AP/E8UV)
JR947	1-216-295-00	METAL CHIP	0	5%	1/10W
JR950	1-216-295-00	METAL CHIP	0	5%	1/10W (E7UY/E7:AE, AP, NC, UB, VP/E8UV)

MA-144

Ref. No.	Part No.	Description	Remark
JR951	1-216-295-00	METAL CHIP 0 5% 1/10W (ER7UY/E7:AE, AP, NC, UB, VP/E8UV)	
JR953	1-216-296-00	METAL CHIP 0 5% 1/8W	
< COIL >			
L101	1-414-189-31	INDUCTOR 100uH	
L102	1-410-521-11	INDUCTOR 100uH	
L103	1-410-519-11	INDUCTOR 68uH	
L201	1-410-513-11	INDUCTOR 22uH	
L202	1-414-183-41	INDUCTOR 10uH	
L301	1-414-189-31	INDUCTOR 100uH	
L302	1-414-186-31	INDUCTOR 33uH (E7:B, VP)	
L303	1-408-413-00	INDUCTOR 22uH	
L304	1-410-521-11	INDUCTOR 100uH	
L501	1-410-525-11	INDUCTOR 220uH (E7:B, NP)	
L502	1-410-525-11	INDUCTOR 220uH (E7:B, NP)	
L503	1-410-525-11	INDUCTOR 220uH (E7:B, NP)	
L504	1-410-525-11	INDUCTOR 220uH (E7:B, NP)	
L601	1-414-189-31	INDUCTOR 100uH	
L602	1-408-424-00	INDUCTOR 180uH	
L603	1-414-189-31	INDUCTOR 100uH	
L605	1-414-184-41	INDUCTOR 15uH	
L606	1-410-511-11	INDUCTOR 15uH	
L607	1-414-189-31	INDUCTOR 100uH	
L608	1-410-519-11	INDUCTOR 68uH (E7:B)	
L609	1-408-421-00	INDUCTOR 100uH	
L610	1-414-189-31	INDUCTOR 100uH	
L611	1-414-189-31	INDUCTOR 100uH (E7:B)	
L612	1-414-189-31	INDUCTOR 100uH	
L613	1-414-189-31	INDUCTOR 100uH (E7:B, VP)	
L614	1-410-519-11	INDUCTOR 68uH	
L651	1-414-183-41	INDUCTOR 10uH	
L701	1-414-189-31	INDUCTOR 100uH	
L702	1-408-425-00	INDUCTOR 220uH	
L703	1-408-425-00	INDUCTOR 220uH	
L704	1-410-525-11	INDUCTOR 220uH	
L705	1-410-525-11	INDUCTOR 220uH	
L706	1-408-401-00	INDUCTOR 2.2uH	
L708	1-408-401-00	INDUCTOR 2.2uH	
L801	1-414-189-31	INDUCTOR 100uH (E7:B)	
L802	1-414-183-41	INDUCTOR 10uH (E7:B)	
L804	1-414-183-41	INDUCTOR 10uH (E7:B)	
L852	1-410-687-11	INDUCTOR 1.2mH	
L853	1-410-687-11	INDUCTOR 1.2mH	
< TRANSISTOR >			
Q101	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q102	8-729-421-19	TRANSISTOR UN2213	
Q103	8-729-422-27	TRANSISTOR 2SD601A-Q	

Ref. No.	Part No.	Description	Remark
Q105	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q107	8-729-216-22	TRANSISTOR 2SA1162	
Q201	8-729-424-56	TRANSISTOR UN211L	
Q301	8-729-421-19	TRANSISTOR UN2213 (E7:B, VP)	
Q303	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q304	8-729-216-22	TRANSISTOR 2SA1162	
Q305	8-729-422-27	TRANSISTOR 2SD601A-Q (E7:B, NP)	
Q306	8-729-424-18	TRANSISTOR UN2113	
Q501	8-729-216-22	TRANSISTOR 2SA1162 (E7:B, NP)	
Q502	8-729-422-27	TRANSISTOR 2SD601A-Q (E7:B, NP)	
Q503	8-729-422-27	TRANSISTOR 2SD601A-Q (E7:B, NP)	
Q601	8-729-421-19	TRANSISTOR UN2213 (E7:B, VP)	
Q602	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q604	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q605	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q606	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q607	8-729-421-19	TRANSISTOR UN2213 (E7:B)	
Q608	8-729-424-56	TRANSISTOR UN211L	
Q609	8-729-421-19	TRANSISTOR UN2213	
Q613	8-729-421-19	TRANSISTOR UN2213	
Q614	8-729-421-19	TRANSISTOR UN2213 (E7:B, VP)	
Q615	8-729-424-18	TRANSISTOR UN2113	
Q616	8-729-421-19	TRANSISTOR UN2213	
Q617	8-729-216-22	TRANSISTOR 2SA1162	
Q701	8-729-216-22	TRANSISTOR 2SA1162	
Q702	8-729-424-56	TRANSISTOR UN211L	
Q703	8-729-421-19	TRANSISTOR UN2213	
Q704	8-729-216-22	TRANSISTOR 2SA1162	
Q705	8-729-421-19	TRANSISTOR UN2213	
Q801	8-729-173-38	TRANSISTOR 2SA733-K (E7:B)	
Q803	8-729-422-27	TRANSISTOR 2SD601A-Q (E7:B)	
Q851	8-729-012-31	TRANSISTOR 2SC4040-TL2-Q	
Q852	8-729-012-31	TRANSISTOR 2SC4040-TL2-Q	
Q853	8-729-421-19	TRANSISTOR UN2213	
Q854	8-729-424-08	TRANSISTOR UN2111	
Q855	8-729-424-18	TRANSISTOR UN2113	
Q856	8-729-421-19	TRANSISTOR UN2213 (E7:B, NP)	
< RESISTOR >			
R101	1-216-119-00	METAL CHIP 820K 5% 1/10W	
R102	1-216-093-00	METAL CHIP 68K 5% 1/10W	
R103	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R104	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R105	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R106	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R107	1-216-037-00	METAL CHIP 330 5% 1/10W	
R108	1-216-025-00	METAL CHIP 100 5% 1/10W	
R111	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R112	1-216-079-00	METAL CHIP 18K 5% 1/10W	

Ref. No.	Part No.	Description	Remark			
R113	1-216-048-00	METAL CHIP	910	5%	1/10W	
R114	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R115	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R116	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R117	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R118	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R119	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R120	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R121	1-216-041-00	METAL CHIP	470	5%	1/10W	
R122	1-216-033-00	METAL CHIP	220	5%	1/10W	
R123	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R124	1-249-429-11	CARBON	10K	5%	1/4W	
R131	1-249-417-11	CARBON	1K	5%	1/4W F	
R132	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R201	1-216-295-00	METAL CHIP	0	5%	1/10W	
R202	1-216-295-00	METAL CHIP	0	5%	1/10W	
R203	1-249-429-11	CARBON	10K	5%	1/4W	
R204	1-249-429-11	CARBON	10K	5%	1/4W	
R205	1-249-429-11	CARBON	10K	5%	1/4W	
R206	1-249-436-11	CARBON	39K	5%	1/4W	
R207	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R208	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R209	1-215-464-00	METAL	62K	1%	1/6W	
R210	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R211	1-216-661-11	METAL CHIP	2.7K	0.5%	1/10W	
R212	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R213	1-249-421-11	CARBON	2.2K	5%	1/4W F	
R214	1-247-885-00	CARBON	180K	5%	1/4W	
R215	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R216	1-216-198-00	METAL CHIP	1K	5%	1/8W	
R217	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R218	1-216-689-11	METAL CHIP	39K	0.5%	1/10W	
R219	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R220	1-249-431-11	CARBON	15K	5%	1/4W	
R222	1-249-422-11	CARBON	2.7K	5%	1/4W F	
R223	1-249-429-11	CARBON	10K	5%	1/4W	
R224	1-249-421-11	CARBON	2.2K	5%	1/4W F	
R225	1-249-437-11	CARBON	47K	5%	1/4W	
R226	1-249-437-11	CARBON	47K	5%	1/4W	
R227	1-249-429-11	CARBON	10K	5%	1/4W	
R230	1-249-429-11	CARBON	10K	5%	1/4W	
R240	1-249-418-11	CARBON	1.2K	5%	1/4W F	
R301	1-216-073-00	METAL CHIP	10K	5%	1/10W (E7:B, VP)	
R302	1-216-073-00	METAL CHIP	10K	5%	1/10W (E7:B, VP)	
R303	1-216-033-00	METAL CHIP	220	5%	1/10W	
R304	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R305	1-216-295-00	METAL CHIP	0	5%	1/10W	
R306	1-216-295-00	METAL CHIP	0	5%	1/10W	
R307	1-216-043-00	METAL CHIP	560	5%	1/10W	

Ref. No.	Part No.	Description	Remark			
R308	1-216-101-00	METAL CHIP	150K	5%	1/10W	
R309	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	
R310	1-216-043-00	METAL CHIP	560	5%	1/10W	
R311	1-249-429-11	CARBON	10K	5%	1/4W	
R312	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R313	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R314	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R315	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R316	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R503	1-216-022-00	METAL CHIP	75	5%	1/10W (E7:B, NP)	
R504	1-249-417-11	CARBON	1K	5%	1/4W F (E7:B, NP)	
R505	1-216-041-00	METAL CHIP	470	5%	1/10W (E7:B, NP)	
R506	1-249-413-11	CARBON	470	5%	1/4W F (E7:B, NP)	
R507	1-249-414-11	CARBON	560	5%	1/4W F (E7:B, NP)	
R508	1-249-414-11	CARBON	560	5%	1/4W F (E7:B, NP)	
R509	1-216-076-00	METAL CHIP	13K	5%	1/10W (E7:B, NP)	
R510	1-216-075-00	METAL CHIP	12K	5%	1/10W (E7:B, NP)	
R511	1-216-097-00	METAL CHIP	100K	5%	1/10W (E7:B, NP)	
R512	1-216-097-00	METAL CHIP	100K	5%	1/10W (E7:B, NP)	
R513	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (E7:B, NP)	
R514	1-216-097-00	METAL CHIP	100K	5%	1/10W (E7:B, NP)	
R515	1-216-097-00	METAL CHIP	100K	5%	1/10W (E7:B, NP)	
R516	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (E7:B, NP)	
R601	1-216-041-00	METAL CHIP	470	5%	1/10W	
R602	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R603	1-249-417-11	CARBON	1K	5%	1/4W F	
R604	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R605	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R606	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R607	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R608	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R609	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R610	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R611	1-216-035-00	METAL CHIP	270	5%	1/10W	
R612	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R613	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R614	1-216-035-00	METAL CHIP	270	5%	1/10W	
R615	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R616	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R617	1-216-689-11	METAL CHIP	39K	0.5%	1/10W	
R618	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R619	1-249-413-11	CARBON	470	5%	1/4W F (E7:B)	
R620	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R621	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R625	1-249-417-11	CARBON	1K	5%	1/4W F (E7:VP)	
R626	1-249-429-11	CARBON	10K	5%	1/4W (E7:B, NP)	
R627	1-249-425-11	CARBON	4.7K	5%	1/4W F	
R628	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R629	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	

MA-144

MD-56

Ref. No.	Part No.	Description	Remark		
R630	1-216-041-00	METAL CHIP	470	5%	1/10W
R631	1-216-043-00	METAL CHIP	560	5%	1/10W
R632	1-216-073-00	METAL CHIP	10K	5%	1/10W
R636	1-216-049-00	METAL CHIP	1K	5%	1/10W
R690	1-249-409-11	CARBON	220	5%	1/4W F(E7:VP)
R691	1-249-401-11	CARBON	47	5%	1/4W F(E7:VP)
R692	1-249-401-11	CARBON	47	5%	1/4W F(E7:VP)
R693	1-249-409-11	CARBON	220	5%	1/4W F(E7:VP)
R701	1-249-408-11	CARBON	180	5%	1/4W F (E7UY/E7:AE, AP, NC, UB, VP/E8UV)
R701	1-249-409-11	CARBON	220	5%	1/4W F(E7:B, NP)
R702	1-249-407-11	CARBON	150	5%	1/4W F (E7UY/E7:AE, AP, NC, UB, VP/E8UV)
R702	1-249-408-11	CARBON	180	5%	1/4W F(E7:B, NP)
R703	1-216-021-00	METAL CHIP	68	5%	1/10W
R704	1-216-022-00	METAL CHIP	75	5%	1/10W
R705	1-216-049-00	METAL CHIP	1K	5%	1/10W(E7:B, NP)
R706	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R707	1-216-049-00	METAL CHIP	1K	5%	1/10W
R708	1-216-041-00	METAL CHIP	470	5%	1/10W
R709	1-216-041-00	METAL CHIP	470	5%	1/10W
R710	1-249-414-11	CARBON	560	5%	1/4W F
R711	1-249-414-11	CARBON	560	5%	1/4W F
R712	1-249-433-11	CARBON	22K	5%	1/4W (E7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)
R712	1-249-422-11	CARBON	2.7K	5%	1/4W F(E7:B)
R715	1-216-037-00	METAL CHIP	330	5%	1/10W
R717	1-216-049-00	METAL CHIP	1K	5%	1/10W
R804	1-216-089-00	METAL CHIP	47K	5%	1/10W(E7:B)
R805	1-249-405-11	CARBON	100	5%	1/4W F(E7:B)
R806	1-216-071-00	METAL CHIP	8.2K	5%	1/10W(E7:B)
R807	1-216-075-00	METAL CHIP	12K	5%	1/10W(E7:B)
R808	1-216-049-00	METAL CHIP	1K	5%	1/10W(E7:B)
R810	1-216-025-00	METAL CHIP	100	5%	1/10W(E7:B)
R811	1-216-037-00	METAL CHIP	330	5%	1/10W(E7:B)
R812	1-216-037-00	METAL CHIP	330	5%	1/10W(E7:B)
R820	1-216-049-00	METAL CHIP	1K	5%	1/10W(E7:B)
R821	1-216-049-00	METAL CHIP	1K	5%	1/10W(E7:B)
R824	1-249-417-11	CARBON	1K	5%	1/4W F (E7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)
R825	1-216-295-00	METAL CHIP	0	5%	1/10W(E7:B)
R826	1-216-295-00	METAL CHIP	0	5%	1/10W(E7:B)
R838	1-216-296-00	METAL CHIP	0	5%	1/8W (E7UY/E7:AE, AP, B, NC, NP, UB/E8UV)
R838	1-216-190-00	METAL GLAZE	470	5%	1/8W (E7:VP)
R852	1-216-083-00	METAL CHIP	27K	5%	1/10W
R853	1-216-083-00	METAL CHIP	27K	5%	1/10W
R854	1-216-669-11	METAL CHIP	5.6K	0.5%	1/10W
R855	1-216-653-11	METAL CHIP	1.2K	0.5%	1/10W

Ref. No.	Part No.	Description	Remark		
R859	1-216-295-00	METAL CHIP	0	5%	1/10W
R866	1-216-001-00	METAL CHIP	10	5%	1/10W
R868	1-216-081-00	METAL CHIP	22K	5%	1/10W
R869	1-249-395-11	CARBON	15	5%	1/4W F
R870	1-216-083-00	METAL CHIP	27K	5%	1/10W
R871	1-249-394-11	CARBON	12	5%	1/6W F
R872	1-216-295-00	METAL CHIP	0	5%	1/10W
R873	1-216-097-00	METAL CHIP	100K	5%	1/10W(E7:B, NP)
R874	1-216-097-00	METAL CHIP	100K	5%	1/10W(E7:B, NP)
R875	1-216-061-00	METAL CHIP	3.3K	5%	1/10W(E7:B, NP)
R898	1-216-049-00	METAL CHIP	1K	5%	1/10W
R899	1-216-049-00	METAL CHIP	1K	5%	1/10W
< RF MODULATOR >					
RF701	1-466-328-11	MODULATOR, RF (RFU-2017) (E7:AE, AP, NC, NP, VP)			
RF701	1-466-348-11	MODULATOR, RF (RFU-2023) (E7:B)			
RF701	1-466-347-11	MODULATOR, RF (RFU-2024) (E7UY/E7:UB/E8UV)			
< VARIABLE RESISTOR >					
RV201	1-238-019-11	RES, ADJ, CARBON 47K			
RV202	1-238-019-11	RES, ADJ, CARBON 47K			
RV851	1-238-020-11	RES, ADJ, CARBON 100K			
< TRANSFORMER >					
T851	1-423-413-11	TRANSFORMER, BIAS OSCILLATION			
T852	1-423-415-11	TRANSFORMER, BIAS OSCILLATION			
< TUNER >					
TU801	1-693-205-11	TUNER (BTF-3C402) (E7:B)			
< VIBRATOR >					
X201	1-578-774-11	VIBRATOR, CRYSTAL (12MHz)			
X301	1-577-289-11	VIBRATOR, CRYSTAL (17.1MHz)			
X302	1-577-165-11	VIBLATOR, CERAMIC (500kHz)			

*	A-6754-472-A MD-56 BOARD, COMPLETE				

< CAPACITOR >					
C001	1-161-494-00	CERAMIC	0.022uF		25V
C002	1-161-494-00	CERAMIC	0.022uF		25V
C003	1-126-157-11	ELECT	10uF	20%	16V
C004	1-161-379-00	CERAMIC	0.01uF	20%	25V
C006	1-124-589-11	ELECT	47uF	20%	16V

Ref. No.	Part No.	Description	Remark	
C008	1-164-159-11	CERAMIC	0. 1uF	50V
C009	1-164-159-11	CERAMIC	0. 1uF	50V
C022	1-161-379-00	CERAMIC	0. 01uF	20% 25V
C025	1-162-294-31	CERAMIC	0. 001uF	10% 50V
C026	1-162-294-31	CERAMIC	0. 001uF	10% 50V
C050	1-124-238-71	ELECT	4. 7uF	20% 25V
C051	1-124-238-71	ELECT	4. 7uF	20% 25V
C052	1-124-238-71	ELECT	4. 7uF	20% 25V
C053	1-126-157-11	ELECT	10uF	20% 16V
C054	1-126-096-11	ELECT	10uF	20% 35V
C055	1-164-159-11	CERAMIC	0. 1uF	50V
C056	1-164-159-11	CERAMIC	0. 1uF	50V
C057	1-164-159-11	CERAMIC	0. 1uF	50V
C058	1-162-852-11	CERAMIC	0. 15uF	10% 16V
C059	1-162-851-11	CERAMIC	0. 1uF	10% 16V
C060	1-126-157-11	ELECT	10uF	20% 16V
< CONNECTOR >				
CN001	1-564-726-11	PIN HEADER, ANGLE 10P		
CN002	1-569-335-11	CONNECTOR, BOARD TO BOARD 9P		
CN003	1-691-643-11	CONNECTOR, BOARD TO BOARD		
CN004	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P		
CN005	1-506-482-11	PIN, CONNECTOR 3P		
CN006	1-569-333-11	CONNECTOR, BOARD TO BOARD 3P		
CN007	1-569-341-11	CONNECTOR, BOARD TO BOARD 19P		
< DIODE >				
D001	8-719-985-00	DIODE GL451VS1		
D004	8-719-109-93	DIODE RD6. 2ES-B2		
D005	8-719-109-93	DIODE RD6. 2ES-B2		
D006	8-719-109-93	DIODE RD6. 2ES-B2		
D007	8-719-109-93	DIODE RD6. 2ES-B2		
< IC >				
IC001	8-759-420-83	IC AN3814K		
IC002	8-759-912-77	IC uPC324C		
IC003	8-759-987-16	IC LM393P		
< PHOTO INTERRUPTER >				
PH001	8-759-144-33	IC PS6002		
PH002	8-759-144-33	IC PS6002		
< TRANSISTOR >				
Q001	8-729-926-31	TRANSISTOR PT483F1S		
Q002	8-729-926-31	TRANSISTOR PT483F1S		

Ref.No.	Part No.	Description	Remark		
< RESISTOR >					
R001	1-249-423-11	CARBON	3. 3K	5%	1/4W F
R002	1-249-423-11	CARBON	3. 3K	5%	1/4W F
R003	1-249-426-11	CARBON	5. 6K	5%	1/4W
R004	1-249-426-11	CARBON	5. 6K	5%	1/4W
R005	1-249-417-11	CARBON	1K	5%	1/4W F
R006	1-249-441-11	CARBON	100K	5%	1/4W
R007	1-249-441-11	CARBON	100K	5%	1/4W
R008	1-249-425-11	CARBON	4. 7K	5%	1/4W F
R009	1-249-408-11	CARBON	180	5%	1/4W F
R010	1-249-422-11	CARBON	2. 7K	5%	1/4W F
R011	1-249-437-11	CARBON	47K	5%	1/4W
R012	1-249-421-11	CARBON	2. 2K	5%	1/4W F
R015	1-249-437-11	CARBON	47K	5%	1/4W
R016	1-249-421-11	CARBON	2. 2K	5%	1/4W F
R017	1-249-429-11	CARBON	10K	5%	1/4W
R018	1-249-429-11	CARBON	10K	5%	1/4W
R019	1-249-429-11	CARBON	10K	5%	1/4W
R020	1-249-429-11	CARBON	10K	5%	1/4W
R023	1-249-414-11	CARBON	560	5%	1/4W F
R050	1-249-395-11	CARBON	15	5%	1/4W F
R051	1-249-395-11	CARBON	15	5%	1/4W F
R052	1-249-395-11	CARBON	15	5%	1/4W F
R053	1-249-418-11	CARBON	1. 2K	5%	1/4W F
R054	1-216-347-11	METAL OXIDE	0. 68	5%	1W F
R055	1-249-437-11	CARBON	47K	5%	1/4W
R056	1-249-430-11	CARBON	12K	5%	1/4W
R057	1-249-430-11	CARBON	12K	5%	1/4W
R058	1-249-429-11	CARBON	10K	5%	1/4W
R059	1-249-429-11	CARBON	10K	5%	1/4W
< SWITCH >					
S001	1-570-953-11	SWITCH, PUSH (1 KEY) (C-U/D)			
S002	1-570-953-11	SWITCH, PUSH (1 KEY) (REC PRF)			

*	A-6754-471-A MF-171 BOARD, COMPLETE				

< CAPACITOR >					
C201	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C202	1-162-282-31	CERAMIC	100PF	10%	50V
C203	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C204	1-162-282-31	CERAMIC	100PF	10%	50V
< CONNECTOR >					
* CN201	1-691-407-11	CONNECTOR. BOARD TO BOARD 10P			

MF-171

MF-172

Ref. No.	Part No.	Description	Remark
< DIODE >			
D201	8-719-940-82 LED	SLR34MC3	
D202	8-719-940-82 LED	SLR34MC3	
D203	8-719-940-99 LED	SLR34VC3	
D205	8-719-109-93 DIODE	RD6. 2ES-B2	
< IC >			
IC201	1-466-833-11 IC	RAY-CATCHER BLOCK, REMOCON	
< COIL >			
L201	1-410-336-11 INDUCTOR	220uH	
L202	1-410-336-11 INDUCTOR	220uH	
< JACK >			
PJ201	1-580-845-11 JACK, PIN 3P	(LINE IN 2)	
< TRANSISTOR >			
Q201	8-729-421-19 TRANSISTOR	UN2213	
Q202	8-729-216-22 TRANSISTOR	2SA1162	
031-11	CERAMIC CHIP	0.01uF 50V	
< RESISTOR >			
R201	1-216-089-00 METAL CHIP	47K 5% 1/10W	
R202	1-216-022-00 METAL CHIP	75 5% 1/10W	
R203	1-216-041-00 METAL CHIP	470 5% 1/10W	
R204	1-216-041-00 METAL CHIP	470 5% 1/10W	
R205	1-216-021-00 METAL CHIP	68 5% 1/10W	
R206	1-216-031-00 METAL CHIP	180 5% 1/10W	
R207	1-216-057-00 METAL CHIP	2.2K 5% 1/10W	
< SWITCH >			
S201	1-571-977-11 SWITCH, TACTIL	(ON/STANDBY)	
S202	1-571-977-11 SWITCH, TACTIL	(EJECT)	

Ref. No.	Part No.	Description	Remark
*	A-6756-883-A	MF-172 BOARD, COMPLETE (E7:AE, AP)	

*	A-6756-897-A	MF-172 BOARD, COMPLETE (E7:B)	

*	A-6756-892-A	MF-172 BOARD, COMPLETE (E7:NC)	

*	A-6756-889-A	MF-172 BOARD, COMPLETE (E7:NP)	

*	A-6756-887-A	MF-172 BOARD, COMPLETE	
	A-6756-887-B	(ER7UY/E7:UB/E8UV)	

*	A-6756-893-A	MF-172 BOARD, COMPLETE (E7:VP)	

< BUZZER >			
BZ101	1-529-104-11 BUZZER, PIEZOELECTRIC		
< CAPACITOR >			
C101	1-128-057-11 ELECT	330uF 20% 6.3V	
C102	1-163-031-11 CERAMIC CHIP	0.01uF 50V	
C103	1-125-486-11 DOUBLE LAYERS	0.22F 5.5V	
C104	1-163-031-11 CERAMIC CHIP	0.01uF 50V	
C105			
C106	1-164-004-11 CERAMIC CHIP	0.1uF 10% 25V	
C107	1-163-234-11 CERAMIC CHIP	20PF 5% 50V	
C108	1-163-235-11 CERAMIC CHIP	22PF 5% 50V	
C109	1-163-031-11 CERAMIC CHIP	0.01uF 50V	
C110	1-163-031-11 CERAMIC CHIP	0.01uF 50V	
C111	1-124-261-00 ELECT	10uF 20% 50V	
C112	1-163-009-11 CERAMIC CHIP	0.001uF 10% 50V	
C113	1-163-117-00 CERAMIC CHIP	100PF 5% 50V	
C114	1-161-329-00 CERAMIC	0.0068uF 20% 16V	
< CONNECTOR >			
CN101	1-568-079-11 CONNECTOR (RECEPTALE) 20P		
CN102	1-568-079-11 CONNECTOR (RECEPTALE) 20P		
CN103	1-695-947-11 CONNECTOR, BOARD TO BOARD 10P		
CN104	1-569-341-11 CONNECTOR, BOARD TO BOARD 19P		
< DIODE >			
D101	8-719-911-19 DIODE 1SS119		
D102	8-719-911-19 DIODE 1SS119		
D104	8-719-110-08 DIODE RD6. 2ES-B2		
D107	8-719-200-82 DIODE 11ES2		
< FILTER >			
FL101	1-517-132-11 INDICATOR TUBE, FLUORESCENT	(ER7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)	
FL101	1-517-133-11 INDICATOR TUBE, FLUORESCENT	(E7:B)	

MF-172

MF-173

Ref.No.	Part No.	Description	Remark
< IC >			
IC101	8-759-172-62	IC MB89095-116	
IC102	8-759-501-99	IC ST93C46AB1	
IC103	8-759-520-98	IC PST572K	
IC104	8-759-510-43	IC PST572C	
< JUMPER RESISTOR >			
JR101	1-216-296-00	METAL CHIP 0 5% 1/8W	
JR104	1-216-295-00	METAL CHIP 0 5% 1/10W	
JR111	1-216-295-00	METAL CHIP 0 5% 1/10W	
< COIL >			
L101	1-410-509-11	INDUCTOR 10uH	
< RESISTOR >			
R101	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R102	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R103	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R104	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R105	1-216-057-00	METAL CHIP 2.2K 5% 1/10W (E7:AE, AP)	
R105	1-216-089-00	METAL CHIP 47K 5% 1/10W (E7:B)	
R105	1-216-081-00	METAL CHIP 22K 5% 1/10W (E7:NC)	
R105	1-216-075-00	METAL CHIP 12K 5% 1/10W (E7:NP)	
R105	1-216-295-00	METAL CHIP 0 5% 1/10W (E7UY/E7:UB/E8UV)	
R105	1-216-065-00	METAL CHIP 4.7K 5% 1/10W (E7:VP)	
R107	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R108	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R109	1-216-033-00	METAL CHIP 220 5% 1/10W	
R110	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R111	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R112	1-216-073-00	METAL CHIP 10K 5% 1/10W (E7:B, NP)	
R113	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R114	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R115	1-216-113-00	METAL CHIP 470K 5% 1/10W	
R116	1-216-095-00	METAL CHIP 82K 5% 1/10W	
R117	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R118	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R119	1-216-198-00	METAL CHIP 1K 5% 1/8W	
R120	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R121	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R122	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R123	1-216-295-00	METAL CHIP 0 5% 1/10W	
R124	1-216-065-00	METAL CHIP 4.7K 5% 1/10W (E7:B, NP)	
R125	1-216-065-00	METAL CHIP 4.7K 5% 1/10W (E7:B, NP)	
R126	1-216-041-00	METAL CHIP 470 5% 1/10W	
R127	1-216-041-00	METAL CHIP 470 5% 1/10W	
R129	1-249-429-11	CARBON 10K 5% 1/4W	

Ref.No.	Part No.	Description	Remark
R130	1-216-198-00	METAL CHIP 1K 5% 1/8W	
R131	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R132	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R133	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R134	1-249-417-11	CARBON 1K 5% 1/4W F	
R135	1-249-417-11	CARBON 1K 5% 1/4W F	
R136	1-216-041-00	METAL CHIP 470 5% 1/10W	
< VIBRATOR >			
X101	1-579-463-11	VIBRATOR, CRYSTAL (32.768kHz)	
X102	1-579-175-11	VIBRATOR, CERAMIC (10MHz)	

*	A-6756-885-A	MF-173 BOARD, COMPLETE	
	A-6756-885-B	(E7UY/E7:AE, B, NC, NP, UB)	

*	A-6756-895-A	MF-173 BOARD, COMPLETE (E7:AP, VP/E8UV)	

< CAPACITOR >			
C001	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V	
< CONNECTOR >			
CN001	1-569-338-11	CONNECTOR, BOARD TO BOARD 19P	
CN002	1-580-850-11	CONNECTOR (DMS) 8P	
< DIODE >			
D001	8-719-940-99	LED SLR34VC3 (STEREO BILINGUAL: EXCEPT E7B) (STEREO:E7B)	
D002	8-719-940-99	LED SLR34VC3 (TIMER REC:EXCEPT E7B) (ENR PROG:E7B)	
D003	8-719-940-99	LED SLR34VC3 (REC:EXCEPT E7B) (ENR:E7B)	
D004	8-719-812-32	LED TLY123 (FF:EXCEPT E7B) (◀◀:E7B)	
D005	8-719-940-82	LED SLR34MC3 (FORWARD:EXCEPT E7B) (AVANCE:E7B)	
D006	8-719-946-30	LED SLR34DC3 (PAUSE)	
D007	8-719-940-82	LED SLR34MC3 (REVERSE:EXCEPT E7B) (RETOUR:E7B)	
D008	8-719-812-32	LED TLY123 (REW:EXCEPT E7B) (▶▶:E7B)	
D009	8-719-812-32	LED TLY123 (HI-SPEED REWIND:EXCEPT E7B) (REMBOB REPAIDE:E7B)	
D010	8-719-940-99	LED SLR34VC3 (AUDIO DUB:EXCEPT E7B) (DOUBLAGE SON:E7B)	
D012	8-719-946-30	LED SLR34DC3 (OPC)	
< JUMPER RESISTOR >			
JR031	1-216-296-00	METAL CHIP 0 5% 1/8W	
JR032	1-216-296-00	METAL CHIP 0 5% 1/8W	

MF-173

PD-37

Ref. No.	Part No.	Description	Remark		
JR033	1-216-296-00	METAL CHIP	0	5%	1/8W
JR034	1-216-296-00	METAL CHIP	0	5%	1/8W
JR035	1-216-295-00	METAL CHIP	0	5%	1/10W
JR036	1-216-296-00	METAL CHIP	0	5%	1/8W
JR037	1-216-295-00	METAL CHIP	0	5%	1/10W
JR038	1-216-296-00	METAL CHIP	0	5%	1/8W
< TRANSISTOR >					
Q001	8-729-421-19	TRANSISTOR UN2213			
Q002	8-729-421-19	TRANSISTOR UN2213			
Q003	8-729-421-19	TRANSISTOR UN2213			
Q004	8-729-421-19	TRANSISTOR UN2213			
Q005	8-729-421-19	TRANSISTOR UN2213			
Q006	8-729-421-19	TRANSISTOR UN2213			
Q007	8-729-421-19	TRANSISTOR UN2213			
Q009	8-729-421-19	TRANSISTOR UN2213			
< RESISTOR >					
R001	1-216-073-00	METAL CHIP	10K	5%	1/10W
R002	1-216-073-00	METAL CHIP	10K	5%	1/10W
R003	1-216-073-00	METAL CHIP	10K	5%	1/10W
R004	1-216-073-00	METAL CHIP	10K	5%	1/10W
R005	1-216-073-00	METAL CHIP	10K	5%	1/10W
R006	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R007	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R008	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R009	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R010	1-216-073-00	METAL CHIP	10K	5%	1/10W
R011	1-216-081-00	METAL CHIP	22K	5%	1/10W (E7:AP, VP/E8UV)
R012	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R013	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R014	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R015	1-216-089-00	METAL CHIP	47K	5%	1/10W
R016	1-216-081-00	METAL CHIP	22K	5%	1/10W
R018	1-216-081-00	METAL CHIP	22K	5%	1/10W
R019	1-216-073-00	METAL CHIP	10K	5%	1/10W
R020	1-216-089-00	METAL CHIP	47K	5%	1/10W
R021	1-216-081-00	METAL CHIP	22K	5%	1/10W
R023	1-216-037-00	METAL CHIP	330	5%	1/10W
R024	1-216-035-00	METAL CHIP	270	5%	1/10W
R025	1-216-035-00	METAL CHIP	270	5%	1/10W
R026	1-216-031-00	METAL CHIP	180	5%	1/10W
R027	1-216-031-00	METAL CHIP	180	5%	1/10W
R028	1-216-037-00	METAL CHIP	330	5%	1/10W
R029	1-216-031-00	METAL CHIP	180	5%	1/10W
R030	1-216-031-00	METAL CHIP	180	5%	1/10W
R031	1-216-031-00	METAL CHIP	180	5%	1/10W
R032	1-216-037-00	METAL CHIP	330	5%	1/10W

Ref. No.	Part No.	Description	Remark		
R034	1-216-035-00	METAL CHIP	270	5%	1/10W
R035	1-216-075-00	METAL CHIP	12K	5%	1/10W
< SWITCH >					
S001	1-571-977-11	SWITCH, TACTIL (REC:EXCEPT E7B) (ENR:E7B)			
S002	1-571-977-11	SWITCH, TACTIL (INPUT SELECT:EXCEPT E7B) (CHOIX ENTREE:E7B)			
S003	1-571-977-11	SWITCH, TACTIL (PROGRAM +:EXCEPT E7B) (CHAIN +:E7B)			
S004	1-571-977-11	SWITCH, TACTIL (PROGRAM -:EXCEPT E7B) (CHAIN -:E7B)			
S005	1-571-977-11	SWITCH, TACTIL (VPS) (E7VP) (PDC) (E7AP/E8UV) (E7:AP, VP/E8UV)			
S006	1-571-977-11	SWITCH, TACTIL (PAUSE)			
S007	1-571-977-11	SWITCH, TACTIL (HI-SPEED REWIND: EXCEPT E7B) (REMBOB RAPIDE:E7B)			
S008	1-571-977-11	SWITCH, TACTIL (TIMER REC:EXCEPT E7B) (ENR PROG:E7B)			
S009	1-572-907-11	SWITCH, SLIDE (PICTURE:EXCEPT E7B) (IMAGE:E7B)			
S010	1-572-907-11	SWITCH, SLIDE (COLOR SYSTEM:EXCEPT E7B) (SYSTEM COULEUR:E7B)			
S011	1-692-381-11	SWITCH, SLIDE (NTSC PB:EXCEPT E7B) (LECTURE NTSC:E7B)			
S012	1-571-977-11	SWITCH, TACTIL (OPC)			
S901	1-572-662-11	SWITCH, ROTARY (DUAL MODE SHUTTLE)			

*	A-6755-956-A	PD-37 BOARD, COMPLETE (E7:AP/E8UV)			

< CAPACITOR >					
C003	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C004	1-124-589-11	ELECT	47uF	20%	16V
C005	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C006	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C007	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C008	1-124-589-11	ELECT	47uF	20%	16V
C009	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C010	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C011	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C012	1-126-301-11	ELECT	1uF	20%	50V
C014	1-163-038-00	CERAMIC CHIP	0.1uF		25V
< CONNECTOR >					
* CN001	1-565-438-11	SOCKET, CONNECTOR (PCB) 10P			

Ref.No.	Part No.	Description	Remark			
< DIODE >						
D001	8-719-801-48	DIODE 1SS193				
D002	8-719-801-48	DIODE 1SS193				
D003	8-719-911-19	DIODE 1SS119				
< IC >						
IC001	8-752-843-10	IC CXP80316-021Q				
IC002	8-759-168-94	IC MV1820E-CG-MPEE				
IC003	8-759-504-44	IC MM1031XMR				
< JUMPER RESISTOR >						
JR001	1-216-295-00	METAL CHIP	0	5%	1/10W	
JR002	1-216-296-00	METAL CHIP	0	5%	1/8W	
< COIL >						
L001	1-410-521-11	INDUCTOR 100uH				
L002	1-410-509-11	INDUCTOR 10uH				
< RESISTOR >						
R001	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R002	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R003	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R004	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R005	1-216-073-00	METAL CHIP	10K	5%	1/10W	
< VIBRATOR >						
X001	1-579-125-11	VIBRATOR, CERAMIC (8MHz)				
X002	1-579-971-11	VIBRATOR, CERAMIC (27.5MHz)				

*	1-647-376-11	PJ-57 BOARD				

< CAPACITOR >						
C701	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C702	1-162-294-31	CERAMIC	0.001uF	10%	50V	
< CONNECTOR >						
CN701	1-506-482-11	PIN, CONNECTOR 3P				
< JACK >						
CNJ701	1-750-247-11	JACK, PIN 2P (AUDIO OUT)				
< DIODE >						
D701	8-719-109-97	DIODE RD6.8ES-B2				

PD-37		PJ-57		POWER BLOCK		
Ref.No.	Part No.	Description	Remark			
< COIL >						
L701	1-410-336-11	INDUCTOR 220uH				
L702	1-410-336-11	INDUCTOR 220uH				
< RESISTOR >						
R701	1-249-415-11	CARBON	680	5%	1/4W	F
R702	1-249-415-11	CARBON	680	5%	1/4W	F
R703	1-249-429-11	CARBON	10K	5%	1/4W	
R704	1-249-429-11	CARBON	10K	5%	1/4W	

△	1-413-789-11	POWER BLOCK (E7:AE, AP, B, NC, NP, VP)				

△	1-413-790-11	POWER BLOCK (E7UY/E7UB/E8UV)				

< CAPACITOR >						
△C101	9-902-933-01	METAL FILM	0.22uF		250V	
△C102	9-902-934-01	METAL FILM	0.1uF		250V	
△C103	9-904-183-01	CERAMIC	1000PF			
△C104	9-904-183-01	CERAMIC	1000PF			
△C105	9-904-183-01	CERAMIC	1000PF			
△C106	9-904-183-01	CERAMIC	1000PF			
△C107	9-902-936-01	CERAMIC	4700PF			
△C108	9-902-936-01	CERAMIC	4700PF			
△C109	9-902-936-01	CERAMIC	4700PF			
△C110	9-904-184-01	ELECT	68uF		400V	
C111	9-904-185-01	ELECT	1uF		100V	
C112	9-902-055-01	CERAMIC	100PF		1KV	
△C113	9-900-525-01	METAL FILM	0.047uF		400V	
C114	1-130-491-51	FILM	0.047uF		50V	
C115	1-130-491-51	FILM	0.047uF		50V	
C201	1-126-964-51	ELECT	10uF		50V	
C202	1-126-768-51	ELECT	2200uF		16V	
C203	1-126-933-51	ELECT	100uF		16V	
C204	1-126-927-51	ELECT	2200uF		10V	
C205	1-126-925-51	ELECT	470uF		10V	
C206	1-126-925-51	ELECT	100uF		50V	
C207	1-126-916-51	ELECT	1000uF		6.3V	
C208	1-126-960-51	ELECT	1uF		50V	
C210	1-130-483-51	FILM	0.01uF		50V	
C211	1-130-483-51	FILM	0.01uF		50V	
< CONNECTOR >						
CN1	1-568-787-11	CONNECTOR 10P				
CN2	1-568-786-21	CONNECTOR 9P				
△CN101	9-904-187-01	CONNECTOR 2P				

The components identified by mark △ or dotted line with mark. △ are critical for safety. Replace only with part number specified.

POWER BLOCK

RP-163

Ref. No.	Part No.	Description	Remark
< DIODE >			
△D101	9-900-511-01	BRIDGE DIODE SIWBA60	
△D102	9-900-513-01	DIODE EGO1C	
△D103	8-719-200-82	DIODE 11ES2	
△D104	8-719-109-61	ZENER DIODE RD3.0ES	
△D105	9-900-514-01	DIODE MA165	
△D106	9-902-050-01	DIODE ERA15-06	
D201	9-900-534-01	DIODE ERA18-02	
△D202	9-902-061-01	DIODE RG4Z	
△D203	8-719-200-82	DIODE 11ES2	
△D204	8-719-981-00	DIODE RK34	
D206	9-900-534-01	DIODE ERA18-02	
△D207	9-902-064-01	DIODE ERA81-004	
△D208	9-903-933-01	ZENER DIODE RD15F	
< FUSE >			
△F101	1-532-388-51	FUSE (250V 2A)	
< FERRITE BEAD >			
△FB-1	9-902-053-01	BEADS CORE	
< IC >			
△IC201	9-900-533-01	IC HA17431P	
< COIL >			
△L101	9-904-182-01	LINE FILTER	
L202	9-902-762-01	CHOKE COIL 20uH	
L203	9-902-762-01	CHOKE COIL 20uH	
< PHOTO COUPLER >			
△PC101	9-904-180-01	COUPLER, PHOTO PS2561	
< TRANSISTOR >			
△Q101	9-904-179-01	TRANSISTOR 2SC4231	
△Q102	9-900-517-01	TRANSISTOR 2SC3377	
< RESISTOR >			
△R101	9-902-945-01	CARBON	1M 1/2W F
R102	1-247-883-31	CARBON	150K 1/4W
R103	1-247-883-31	CARBON	150K 1/4W
R104	1-247-863-31	CARBON	22K 1/4W
△R105	9-904-186-01	CEMENT	4.7 2W
△R106	9-902-942-01	METAL OXIDE FILM	68K 3W
△R107	1-247-739-51	CARBON	100 1/2W F
△R108	1-247-739-51	CARBON	100 1/2W F
R109	1-247-827-31	CARBON (680)	1/2W (FOR ADJUSTMENT)
R110	1-247-883-31	CARBON	150K 1/4W

Ref. No.	Part No.	Description	Remark
△R201	1-247-727-11	CARBON	10 1/2W F
△R202	1-247-727-11	CARBON	10 1/2W F
△R203	1-212-857-51	FUSE	10 1/4W F
△R204	9-902-074-01	FUSE	0.47 1/4W F
R205	1-244-841-11	CARBON	47 1/2W
R206	1-215-428-11	METAL FILM	2K 1/4W
R207		CARBON (FOR ADJUSTMENT)	
R208	1-215-425-31	METAL FILM (1.5K)	1/4W (FOR ADJUSTMENT)
< VARIABLE RESISTOR >			
RV201	9-902-761-01	RES. ADJ. METAL	200
< TRANSFORMER >			
△T101	9-904-181-01	SWITCHING TRANSFORMER	

*	A-6727-471-A	RP-163 BOARD, COMPLETE	

< CAPACITOR >			
C260	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C261	1-124-584-00	ELECT	100uF 20% 10V
C262	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C263	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C264	1-124-257-00	ELECT	2.2uF 20% 50V
C265	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C267	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C270	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C273	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C274	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C275	1-126-160-11	ELECT	1uF 20% 50V
C276	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C290	1-163-129-00	CERAMIC CHIP	330PF 5% 50V
C291	1-163-129-00	CERAMIC CHIP	330PF 5% 50V
C801	1-163-033-00	CERAMIC CHIP	0.022uF 50V
C802	1-163-033-00	CERAMIC CHIP	0.022uF 50V
C803	1-163-033-00	CERAMIC CHIP	0.022uF 50V
C804	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C805	1-163-033-00	CERAMIC CHIP	0.022uF 50V
C806	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C807	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C808	1-124-584-00	ELECT	100uF 20% 10V
C809	1-165-319-11	CERAMIC CHIP	0.1uF 50V
C810	1-124-584-00	ELECT	100uF 20% 10V
C811	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C812	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C813	1-164-336-11	CERAMIC CHIP	0.33uF 25V
C814	1-165-319-11	CERAMIC CHIP	0.1uF 50V

The components identified by mark △ or dotted line with mark. △ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description	Remark		
C815	1-165-319-11	CERAMIC CHIP	0.1uF	50V	
C816	1-165-319-11	CERAMIC CHIP	0.1uF	50V	
C817	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C818	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C819	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C820	1-163-111-00	CERAMIC CHIP	56PF	5%	50V
C821	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C822	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C823	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C824	1-124-589-11	ELECT	47uF	20%	16V
C826	1-124-589-11	ELECT	47uF	20%	16V
C827	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C831	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C834	1-163-088-00	CERAMIC CHIP	5PF		50V
C835	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C839	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C840	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C841	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C842	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C843	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C850	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C851	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C852	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C853	1-163-031-11	CERAMIC CHIP	0.01uF		50V

< CONNECTOR >

CN261	1-506-484-11	PIN, CONNECTOR	5P		
CN801	1-695-486-11	CONNECTOR, BOARD TO BOARD	10P		
CN802	1-506-490-21	PIN, CONNECTOR	11P		
* CN803	1-564-018-51	PIN, CONNECTOR	8P		
* CN804	1-564-028-00	PIN, CONNECTOR	3P		

< DIODE >

D801	8-719-400-18	DIODE MA152WK			
D802	8-719-400-18	DIODE MA152WK			
D803	8-719-400-18	DIODE MA152WK			
D804	8-719-400-18	DIODE MA152WK			
D805	8-719-400-18	DIODE MA152WK			
D806	8-719-400-18	DIODE MA152WK			

< IC >

IC260	8-759-055-49	IC AN3327K			
IC801	8-759-046-75	IC HA118162NT			

< COIL >

L260	1-410-521-11	INDUCTOR	100uH		
L801	1-410-525-11	INDUCTOR	220uH		
L802	1-410-525-11	INDUCTOR	220uH		
L803	1-410-521-11	INDUCTOR	100uH		

Ref.No.	Part No.	Description	Remark		
L804	1-410-521-11	INDUCTOR	100uH		
L806	1-410-515-11	INDUCTOR	33uH		
L807	1-410-516-11	INDUCTOR	39uH		
L808	1-410-511-11	INDUCTOR	15uH		
L809	1-410-511-11	INDUCTOR	15uH		
L810	1-410-524-41	INDUCTOR	180uH		
L811	1-410-521-11	INDUCTOR	100uH		
L812	1-410-521-11	INDUCTOR	100uH		
L850	1-410-509-11	INDUCTOR	10uH		

< TRANSISTOR >

Q802	8-729-422-27	TRANSISTOR	2SD601A-Q		
Q803	8-729-901-06	TRANSISTOR	DTA144EK		
Q804	8-729-422-27	TRANSISTOR	2SD601A-Q		
Q805	8-729-422-37	TRANSISTOR	2SB709A-R		
Q806	8-729-422-37	TRANSISTOR	2SB709A-R		
Q807	8-729-422-27	TRANSISTOR	2SD601A-Q		
Q808	8-729-421-19	TRANSISTOR	UN2213		
Q809	8-729-422-27	TRANSISTOR	2SD601A-Q		
Q810	8-729-421-19	TRANSISTOR	UN2213		
Q811	8-729-301-98	TRANSISTOR	2SB1000A-L		
Q813	8-729-421-19	TRANSISTOR	UN2213		
Q814	8-729-421-19	TRANSISTOR	UN2213		
Q815	8-729-216-22	TRANSISTOR	2SA1162		
Q816	8-729-422-27	TRANSISTOR	2SD601A-Q		
Q817	8-729-216-22	TRANSISTOR	2SA1162		
Q818	8-729-216-22	TRANSISTOR	2SA1162		
Q821	8-729-421-19	TRANSISTOR	UN2213		
Q822	8-729-421-19	TRANSISTOR	UN2213		

< RESISTOR >

R261	1-216-097-00	METAL CHIP	100K	5%	1/10W
R262	1-216-035-00	METAL CHIP	270	5%	1/10W
R263	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R265	1-216-033-00	METAL CHIP	220	5%	1/10W
R266	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R267	1-216-035-00	METAL CHIP	270	5%	1/10W
R271	1-216-079-00	METAL CHIP	18K	5%	1/10W
R801	1-216-023-00	METAL CHIP	82	5%	1/10W
R802	1-216-043-00	METAL CHIP	560	5%	1/10W
R806	1-216-023-00	METAL CHIP	82	5%	1/10W
R807	1-216-023-00	METAL CHIP	82	5%	1/10W
R808	1-216-023-00	METAL CHIP	82	5%	1/10W
R809	1-216-021-00	METAL CHIP	68	5%	1/10W
R810	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R811	1-216-043-00	METAL CHIP	560	5%	1/10W
R812	1-216-023-00	METAL CHIP	82	5%	1/10W
R813	1-216-047-00	METAL CHIP	820	5%	1/10W
R815	1-216-689-11	METAL CHIP	39K	0.5%	1/10W

RP-163

TU-136

Ref. No.	Part No.	Description	Remark			
R816	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	
R817	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R818	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	
R819	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R820	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	
R821	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	
R822	1-216-039-00	METAL CHIP	390	5%	1/10W	
R823	1-216-047-00	METAL CHIP	820	5%	1/10W	
R824	1-216-039-00	METAL CHIP	390	5%	1/10W	
R825	1-216-067-00	METAL CHIP	5. 6K	5%	1/10W	
R826	1-216-063-00	METAL CHIP	3. 9K	5%	1/10W	
R827	1-216-045-00	METAL CHIP	680	5%	1/10W	
R828	1-216-043-00	METAL CHIP	560	5%	1/10W	
R829	1-216-047-00	METAL CHIP	820	5%	1/10W	
R830	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R831	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R832	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R833	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R834	1-216-067-00	METAL CHIP	5. 6K	5%	1/10W	
R838	1-216-053-00	METAL CHIP	1. 5K	5%	1/10W	
R839	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R840	1-216-309-00	METAL CHIP	5. 6	5%	1/10W	
R841	1-216-045-00	METAL CHIP	680	5%	1/10W	
R842	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	
R843	1-216-011-00	METAL CHIP	27	5%	1/10W	
R848	1-216-295-00	METAL CHIP	0	5%	1/10W	
R849	1-216-043-00	METAL CHIP	560	5%	1/10W	
R850	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R854	1-249-409-11	CARBON	220	5%	1/4W F	

*	A-6754-470-A	TU-136 BOARD, COMPLETE (E7:AE, AP, VP)				

*	A-6754-475-A	TU-136 BOARD, COMPLETE (E7:NC, NP)				

*	A-6754-473-A	TU-136 BOARD, COMPLETE (E7UY/E7:UB/E8UV)				

< CAPACITOR >						
C002	1-124-916-11	ELECT	22uF	20%	63V	
C003	1-124-126-00	ELECT	47uF	20%	10V	
C004	1-163-031-11	CERAMIC CHIP	0. 01uF		50V	
C006	1-163-031-11	CERAMIC CHIP	0. 01uF		50V	
C007	1-126-101-11	ELECT	100uF	20%	16V	
C009	1-164-161-11	CERAMIC CHIP	0. 0022uF	10%	100V	
C010	1-163-031-11	CERAMIC CHIP	0. 01uF		50V	
C011	1-124-126-00	ELECT	47uF	20%	10V	
C012	1-163-031-11	CERAMIC CHIP	0. 01uF		50V	
C013	1-124-927-11	ELECT	4. 7uF	20%	100V	

Ref. No.	Part No.	Description	Remark			
C014	1-163-009-11	CERAMIC CHIP	0. 001uF	10%	50V	
C017	1-163-031-11	CERAMIC CHIP	0. 01uF		50V	
		(E7UY/E7:NC, NP, UB/E8UV)				
C018	1-124-126-00	ELECT	47uF	20%	10V	
		(E7UY/E7:NC, NP, UB/E8UV)				
C019	1-126-101-11	ELECT	100uF	20%	16V	
		(E7UY/E7:NC, NP, UB/E8UV)				
C020	1-163-031-11	CERAMIC CHIP	0. 01uF		50V	
		(E7UY/E7:NC, NP, UB/E8UV)				
C022	1-124-907-11	ELECT	10uF	20%	50V	
C023	1-163-031-11	CERAMIC CHIP	0. 01uF		50V	
C024	1-130-483-00	MYLAR	0. 01uF	5%	50V	
		(E7:AE, AP, NC, NP, VP)				
C025	1-126-101-11	ELECT	100uF	20%	16V	
C026	1-124-907-11	ELECT	10uF	20%	50V	
C027	1-124-907-11	ELECT	10uF	20%	50V	
C028	1-124-907-11	ELECT	10uF	20%	50V	
		(E7UY/E7:NC, NP, UB/E8UV)				
C029	1-124-907-11	ELECT	10uF	20%	50V	
		(E7UY/E7:NC, NP, UB/E8UV)				
C030	1-124-907-11	ELECT	10uF	20%	50V	
		(E7:AE, AP, NC, NP, VP)				
C031	1-124-907-11	ELECT	10uF	20%	50V	
		(E7:AE, AP, NC, NP, VP)				
C036	1-124-907-11	ELECT	10uF	20%	50V	
		(E7UY/E7:NC, NP, UB/E8UV)				
C037	1-124-907-11	ELECT	10uF	20%	50V	
		(E7UY/E7:NC, NP, UB/E8UV)				
C038	1-124-907-11	ELECT	10uF	20%	50V	
		(E7UY/E7:NC, NP, UB/E8UV)				
C039	1-124-907-11	ELECT	10uF	20%	50V	
		(E7UY/E7:NC, NP, UB/E8UV)				
< CONNECTOR >						
CN001	1-568-787-11	PIN, CONNECTOR 10P				
CN002	1-568-788-21	PIN, CONNECTOR 11P				
< DIODE >						
D001	8-719-800-76	DIODE 1SS226				
D003	8-719-110-78	DIODE RD33ES-B2				
< IC >						
IC001	8-759-512-95	IC TDA8415 (E7:AE, AP, NC, NP, VP)				
IC002	8-759-996-43	IC RC4558PS-T1 (E7UY/E7:NC, NP, UB/E8UV)				
< JUMPER RESISTOR >						
JR010	1-216-296-00	METAL CHIP	0	5%	1/8W	
		(E7:AE, AP, NC, NP, VP)				
JR011	1-216-296-00	METAL CHIP	0	5%	1/8W	

Ref. No.	Part No.	Description	Remark		
JR012	1-216-296-00	METAL CHIP (ER7UY/E7:NC, NP, UB/E8UV)	0	5%	1/8W
JR013	1-216-296-00	METAL CHIP	0	5%	1/8W
JR014	1-216-296-00	METAL CHIP (ER7UY/E7:NC, NP, UB/E8UV)	0	5%	1/8W
JR015	1-216-296-00	METAL CHIP (ER7UY/E7:UB/E8UV)	0	5%	1/8W
JR016	1-216-296-00	METAL CHIP	0	5%	1/8W
JR017	1-216-296-00	METAL CHIP	0	5%	1/8W
JR018	1-216-296-00	METAL CHIP	0	5%	1/8W
JR019	1-216-296-00	METAL CHIP	0	5%	1/8W
JR020	1-216-296-00	METAL CHIP	0	5%	1/8W
JR021	1-216-296-00	METAL CHIP (ER7UY/E7:UB/E8UV)	0	5%	1/8W
JR022	1-216-296-00	METAL CHIP (E7:AE, AP, NC, NP, VP)	0	5%	1/8W
JR023	1-216-296-00	METAL CHIP (E7:AE, AP, NC, NP, VP)	0	5%	1/8W
JR024	1-216-296-00	METAL CHIP	0	5%	1/8W
JR025	1-216-296-00	METAL CHIP (ER7UY/E7:UB/E8UV)	0	5%	1/8W
< COIL >					
L001	1-408-409-00	INDUCTOR 10uH			
L002	1-408-421-00	INDUCTOR 100uH			
L003	1-408-409-00	INDUCTOR 10uH			
L005	1-408-409-00	INDUCTOR 10uH (ER7UY/E7:NC, NP, UB/E8UV)			
L006	1-408-409-00	INDUCTOR 10uH (ER7UY/E7:NC, NP, UB/E8UV)			
L007	1-408-409-00	INDUCTOR 10uH			
< DECODER BLOCK >					
NCM01	1-466-903-11	DECODER BLOCK (NCA-389A) (E7:NC, NP)			
NCM01	1-466-902-11	DECODER BLOCK, e j (NCA-395A) (ER7UY/E7:UB/E8UV)			
< TRANSISTOR >					
Q001	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q002	8-729-422-27	TRANSISTOR 2SD601A-Q			
Q003	8-729-173-38	TRANSISTOR 2SA733-K			
Q005	8-729-422-27	TRANSISTOR 2SD601A-Q			
< RESISTOR >					
R001	1-216-295-00	METAL CHIP	0	5%	1/10W
R002	1-216-295-00	METAL CHIP	0	5%	1/10W
R003	1-216-295-00	METAL CHIP	0	5%	1/10W
R004	1-216-075-00	METAL CHIP	12K	5%	1/10W
R005	1-216-049-00	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description	Remark		
R006	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R007	1-216-089-00	METAL CHIP	47K	5%	1/10W
R008	1-216-025-00	METAL CHIP	100	5%	1/10W
R010	1-216-295-00	METAL CHIP	0	5%	1/10W
R011	1-216-025-00	METAL CHIP	100	5%	1/10W
R012	1-216-037-00	METAL CHIP	330	5%	1/10W
R013	1-216-037-00	METAL CHIP	330	5%	1/10W
R014	1-216-049-00	METAL CHIP (E7:AE, AP, NC, NP, VP)	1K	5%	1/10W
R015	1-216-049-00	METAL CHIP (E7:AE, AP, NC, NP, VP)	1K	5%	1/10W
R016	1-216-055-00	METAL CHIP (E7:AE, AP, NC, NP, VP)	1.8K	5%	1/10W
R021	1-216-049-00	METAL CHIP (ER7UY/E7:UB/E8UV)	1K	5%	1/10W
R022	1-216-049-00	METAL CHIP (ER7UY/E7:UB/E8UV)	1K	5%	1/10W
R024	1-216-041-00	METAL CHIP	470	5%	1/10W
R025	1-216-041-00	METAL CHIP	470	5%	1/10W
R027	1-216-049-00	METAL CHIP	1K	5%	1/10W
R028	1-216-045-00	METAL CHIP	680	5%	1/10W
R030	1-216-295-00	METAL CHIP	0	5%	1/10W
R031	1-216-295-00	METAL CHIP	0	5%	1/10W
R033	1-216-081-00	METAL CHIP (ER7UY/E7:NC, NP, UB/E8UV)	22K	5%	1/10W
R034	1-216-085-00	METAL CHIP (ER7UY/E7:NC, NP, UB/E8UV)	33K	5%	1/10W
R035	1-216-081-00	METAL CHIP (ER7UY/E7:NC, NP, UB/E8UV)	22K	5%	1/10W
R036	1-216-085-00	METAL CHIP (ER7UY/E7:NC, NP, UB/E8UV)	33K	5%	1/10W
R037	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (E7:NC, NP)
R038	1-216-071-00	METAL CHIP	8.2K	5%	1/10W (E7:NC, NP)
R039	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (E7:NC, NP)
R040	1-216-071-00	METAL CHIP	8.2K	5%	1/10W (E7:NC, NP)
R041	1-216-097-00	METAL CHIP (ER7UY/E7:NC, NP, UB/E8UV)	100K	5%	1/10W
R042	1-216-097-00	METAL CHIP (ER7UY/E7:NC, NP, UB/E8UV)	100K	5%	1/10W
R043	1-216-097-00	METAL CHIP (ER7UY/E7:NC, NP, UB/E8UV)	100K	5%	1/10W
R044	1-216-097-00	METAL CHIP (ER7UY/E7:NC, NP, UB/E8UV)	100K	5%	1/10W
R045	1-216-295-00	METAL CHIP	0	5%	1/10W
R046	1-216-295-00	METAL CHIP	0	5%	1/10W
< VARIABLE RESISTOR >					
RV001	1-241-629-11	RES. ADJ. CARBON 4.7K (E7:AE, AP, NC, NP, VP)			

TU-136

VP-32

Ref. No.	Part No.	Description	Remark
< TUNER >			
TU001	1-693-207-11	TUNER (BTF-3C401) (E7:AE, AP, NC, NP, VP)	
TU001	1-693-206-11	TUNER (BTF-3U601) (ER7UY/E7:UB/E8UV)	
< VIBRATOR >			
X001	1-567-925-11	VIBRATOR, CRYSTAL (E7:AE, AP, NC, NP, VP) (10MHz)	

VP-32 BOARD (E7:VP)			

< CAPACITOR >			
C901	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C902	1-163-809-11	CERAMIC CHIP 0.047uF 10% 25V	
C904	1-163-809-11	CERAMIC CHIP 0.047uF 10% 25V	
C906	1-163-989-11	CERAMIC CHIP 0.033uF 10% 25V	
C910	1-163-121-00	CERAMIC CHIP 150PF 5% 50V	
< CONNECTOR >			
* CN901	1-695-948-11	CONNECTOR, BOARD TO BOARD 10P	
< DIODE >			
D901	8-719-911-19	DIODE 1SS119	
< IC >			
IC901	8-759-030-60	IC SDA5642	
IC902	8-759-147-30	IC uPD75004GB-VSX182	
< JUMPER RESISTOR >			
JR901	1-216-296-00	METAL CHIP 0 5% 1/8W	
JR934	1-216-295-00	METAL CHIP 0 5% 1/10W	
< COIL >			
L941	1-410-509-11	INDUCTOR 10uH	
< RESISTOR >			
R901	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R902	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R903	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R904	1-216-119-00	METAL CHIP 820K 5% 1/10W	
R905	1-216-025-00	METAL CHIP 100 5% 1/10W	
R906	1-216-119-00	METAL CHIP 820K 5% 1/10W	
R907	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R908	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R910	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R911	1-216-073-00	METAL CHIP 10K 5% 1/10W	

Ref. No.	Part No.	Description	Remark
R912	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R913	1-216-073-00	METAL CHIP 10K 5% 1/10W	
< VIBRATOR >			
X901	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)	

MISCELLANEOUS			

30	1-466-935-21	REMOTE COMMANDER (RMT-AG1)	
60	1-555-110-00	CABLE, PIN (ER7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)	
72	1-646-744-13	CP-61 BOARD, COMPLETE (E7:B, NP)	

ACCESSORIES & PACKING MATERIALS			

24	1-466-918-11	REMOTE COMMANDER (RMT-V131) (ER7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)	
24	1-466-918-31	REMOTE COMMANDER (RMT-V131B) (E7:B)	
⚠	1-574-056-11	CORD, POWER (E7:VP)	
⚠	1-574-131-21	CORD, POWER SUPPLY (E7:AE, AP, B, NC, NP)	
⚠	1-590-865-11	CORD, POWER (ER7UY/E7:UB/E8UV)	
	1-696-593-11	CORD, CONNECTION (PAL) (RF) (ER7UY/E7:AE, AP, NC, NP, UB, VP/E8UV)	
	1-696-861-11	CORD, CONNECTION (ER7UY/E7:AE, B, NC, NP, UB, VP/E8UV)	
	1-696-905-11	CORD, CONNECTION (E7:B)	
	3-695-308-01	DRIVER, VOLUME	
	3-755-993-11	MANUAL, INSTRUCTION (ENGLISH) (ER7UY/E7:UB/E8UV)	
	3-755-993-41	MANUAL, INSTRUCTION (ITALIAN, DUTCH) (E7:AE)	
	3-755-993-51	MANUAL, INSTRUCTION (FRENCH, GERMAN, ITALIAN) (E7:VP)	
	3-755-993-61	MANUAL, INSTRUCTION (FRENCH) (E7:B)	
	3-755-993-71	MANUAL, INSTRUCTION (SPANISH) (E7:NP)	
	3-755-993-81	MANUAL, INSTRUCTION (DUTCH, FRENCH, GERMAN) (E7:NC)	
	3-755-993-91	MANUAL, INSTRUCTION (SWEDISH, DANISH, PORTUGUESE) (E7:NC)	
*	3-756-696-11	MANUAL, QUICK START (ENGLISH) (ER7UY/E7:UB/E8UV)	
	3-756-697-11	MANUAL, INSTRUCTION (DUTCH) (E7:AP)	
	3-756-916-11	MANUAL, INSTRUCTION (ENGLISH) (ER7UY)	
*	3-951-057-01	INDIVIDUAL CARTON (ER7UY/E7:AE, AP, NC, NP, UB, VP)	

The components identified by
mark ⚠ or dotted line with mark
⚠ are critical for safety.
Replace only with part number
specified.

Ref. No.	Part No.	Description	Remark
*	3-951-057-11	INDIVIDUAL CARTON (E7:B)	
	3-951-057-41	INDIVIDUAL CARTON (E8UV)	
*	3-951-060-01	CUSHION (UPPER)	
*	3-951-061-01	CUSHION (LOWER)	

HARDWARE LIST

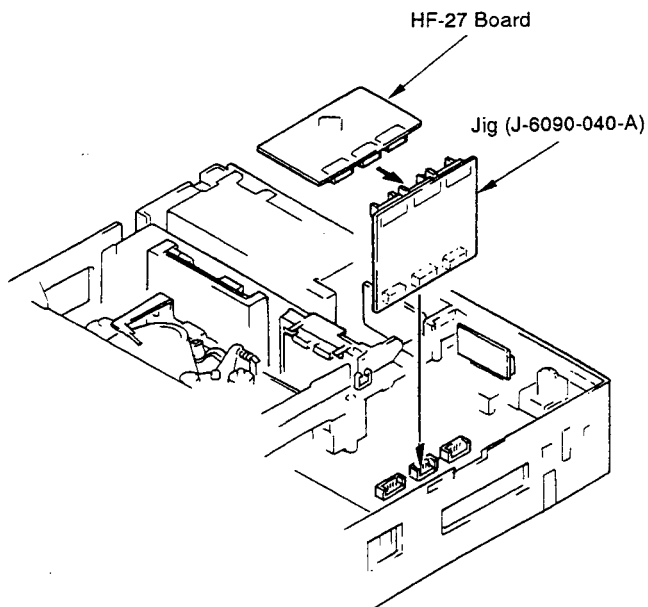
#1	7-621-255-25	SCREW +PTT 2X4 (S)
#4	7-682-645-01	SCREW +PS 3X4
#5	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3
#6	7-682-148-01	SCREW +P 3X8
#7	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3
#8	7-621-732-08	SCREW
#10	7-628-254-05	SCREW +PS 2.6X5
#11	7-624-102-04	STOP RING 1.5, TYPE -E
#12	7-685-648-79	SCREW +BVTP 3X12 TYPE2
#13	7-682-146-01	SCREW +P 3X5

SECTION 7

ELECTRICAL ADJUSTMENTS

During the adjustment, see the Parts Arrangement Diagram relevant to the adjustments on Page 140

- When checking HF-27 board, use the translation board jig (J-6090-040-A).



7-1. PRE-ADJUSTMENT PREPARATIONS

Necessary items and indications for total adjustment of electric circuit of this machine will be described in this chapter.

7-1-1. Instruments to be Used

- 1) Color TV
- 2) Oscilloscope 1 or 2 phenomena, band more than 30 MHz, delay mode, as provided.
- 3) Frequency counter (min. 8 digits)
- 4) PAL pattern generator
- 5) Digital voltmeter
- 6) Audio level meter
- 7) Audio generator
- 8) Attenuator
- 9) Distortion factor meter
- 10) Voice multiple signal generator
- 11) Alignment tape
Part Code: H7099052H (MH-2)
- 12) HiFi alignment tape

7-1-2. Connection

Unless otherwise specified, connect and adjust the measuring instruments as shown in the following diagram.

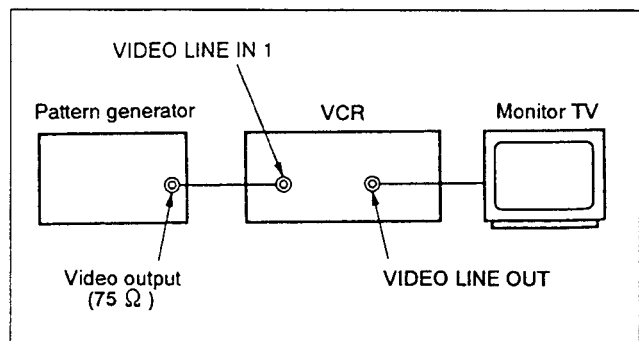


Fig. 7-1.

7-1-3. Set-up Adjustment

In this adjustment, PAL pattern generator is connected with LINE 1 input signal terminal. When check to tuner, connected AERIAL terminal. Check that the amplitudes of video signal SYNC signal, of picture portions, and of burst signals are flat at approximately 0.3, 0.7 and 0.3 V, respectively, and that the level ratio of the burst signal and "red" signal are 0.30 : 0.66. Fig. 7-2. shows video signals (color bars) used in adjusting the video section.

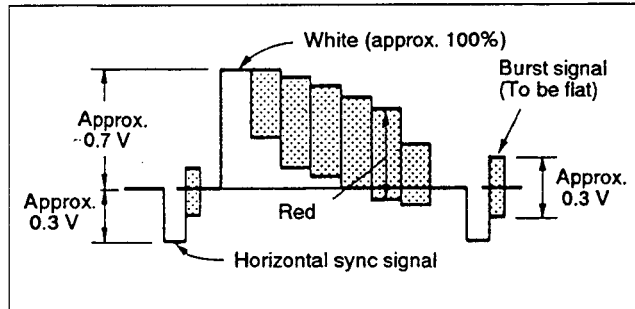


Fig. 7-2.

7-1-4. Alignment Tape (MH-2)

	Time	Video signal	Audio signal
1	10 minutes	Stair-step	6 kHz
2	5 minutes	—	3 kHz
3	10 minutes	Color bar	1 kHz
4	3 minutes	RF sweep	—

Table 7-1.

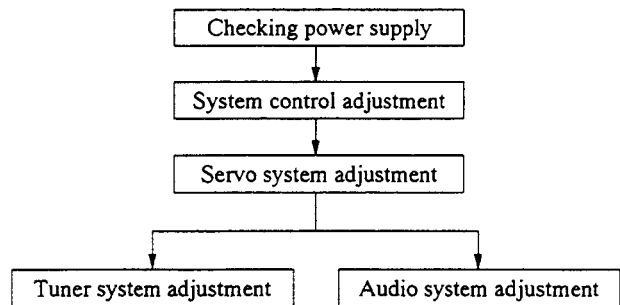
7-1-5. Specified I/O Level and Impedance

Input/output terminal

Video inputs	LINE IN	: phono jacks
	EURO-AV	: 21-pin (Pin ②) 1 Vp-p, 75 Ω , unbalanced, sync negative
Audio inputs	LINE IN	: phono jacks
	47 k Ω , - 7.5 dBs (0 dBs = 0.775 Vrms)	
Video outputs	EURO-AV	: 21-Pin (Pin ② and ⑥) More than 10 k Ω , - 4 dBs
	LINE OUT	: phono jack
Audio outputs	EURO-AV	: 21-pin (Pin ①⑨) 1 Vp-p, 75 Ω , unbalanced, sync negative
	LINE OUT	: phono jack
		- 7.5 dBs at load impedance 47 k Ω
		Output impedance : less than 10 k Ω
		EURO-AV : 21-Pin (Pin ① and ③)
		Output impedance : less than 1 k Ω
		- 4 dBs with 10 k Ω load

7-1-6. Adjusting Sequence

Make the electrical adjustment in the following sequence.



7-2. POWER SUPPLY CHECK (POWER BLOCK)

Mode	E-E
Measuring Instrument	Digital voltmeter
UNSW 6.0 V check	
Measurement Point	Pin ⑤ of CN2
Specified Value	5.9 ± 0.05 Vdc
UNSW - 30 V check	
Measurement Point	Pin ⑤ of CN2
Specified Value	$- 27.0 \pm 3.0$ Vdc
UNSW 35 V check	
Measurement Point	Pin ⑨ of CN2
Specified Value	37.0 ± 3.0 Vdc
UNSW 12 V check	
Measurement Point	Pin ① of CN2
Specified Value	13.6 ± 0.4 Vdc
MTR 12 V check	
Measurement Point	Pin ⑩ of CN1
Specified Value	13.0 ± 0.4 Vdc
HEATER 4 V check	
Measurement Point	+ : Pin ② of CN1 - : Pin ① of CN1
Specified Value	4.1 ± 0.3 Vdc

Checking Method:

- 1) Confirm that each voltage meets its specified value.

POWER BLOCK (Conductor side)

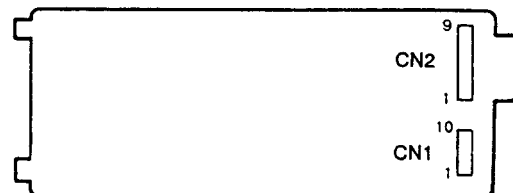


Fig. 7-3.

7-3. SYSTEM CONTROL CHECK

7-3-1. Clock Adjustment (MF-172 Board)

Measurement Point	Pin ⑥ of IC101
Measurement Instrument	Frequency counter
Specified Value	10.0 ± 0.2 MHz

Checking Method:

- 1) Check the reading on frequency counter 10.0 ± 0.2 MHz.

7-4. SERVO SYSTEM ADJUSTMENT

7-4-1. Switching Position Adjustment (MA-144 Board)

Mode	PB
Signal	Alignment tape : SP stair-step section
Measurement Point	CH1: CNJ701 (VIDEO LINE OUT) CH2: Pin ⑩ of CN601 (RF SWP)
Measuring Instrument	Oscilloscope
Adjusting Element	RV202
Specified Value	6.5 ± 0.5 H (416 ± 32 μ sec)

Adjusting Method:

- 1) Once set to STOP mode, then to PB mode.
- 2) Check that switching position is 6.5 ± 0.5 H.
(416 ± 32 μ sec)
If not meet the specified value, turn RV202 and repeat steps 1) to 2).

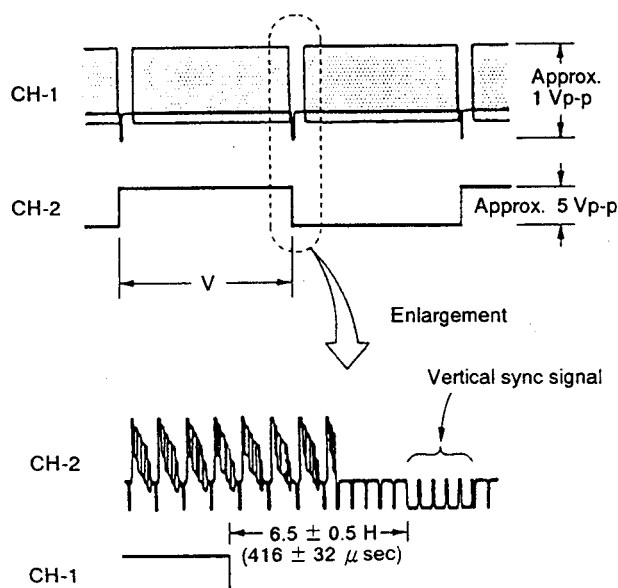


Fig. 7-4.

7-5. AUDIO SYSTEM ADJUSTMENTS

- Adjust the audio system in the SP mode, unless otherwise specified.
Use the alignment tape.
- Adjust both Lch and Rch.

[Connection]

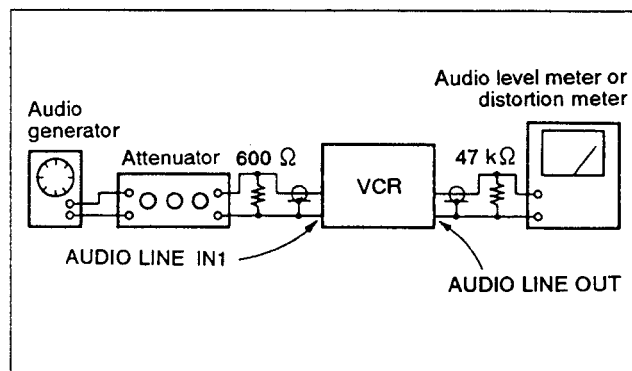


Fig. 7-5.

7-5-1. Hi-Fi Audio System Adjustment

- Set switches and knobs to the following positions to make adjustment unless otherwise specified.
INPUT SELECT switch LINE 1

[Adjusting Sequence]

1. AF switching position
2. VCO fo adjustment
3. AFM deviation adjustment
4. BPF fo adjustment

1. AF Switching Position Adjustment (MA-144 Board)

Mode	PB
Signal	Alignment tape (HiFi 400 Hz)
Measurement Point	CH1: Pin ① of CN857 (MA-144 Board) CH2: Pin ② of CN804 (RP-163 Board)
Measuring Instrument	Oscilloscope
Adjusting Element	RV201
Specified Value	Fig. 7-6.

Adjusting method:

- 1) Adjust RV201 for no dropout.
(Turn and adjust RV201 to the mid-rotation of no dropout range.)

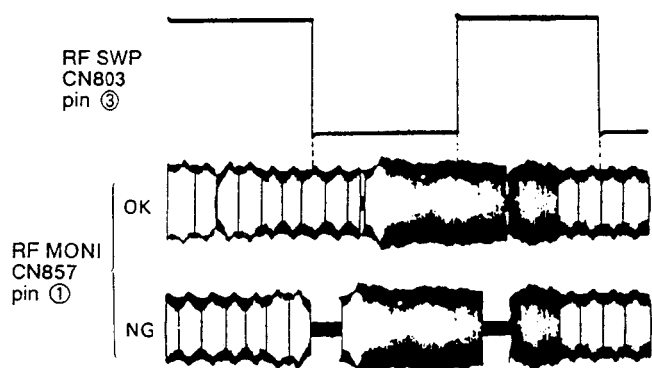


Fig. 7-6

2. VCO f_0 Adjustment (HF-27 Board)

Mode	Recording
Signal	No signal
Measuring Instrument	Frequency counter
1.3 MHz Adjustment	
Measurement Point	Pin ②④ of IC201
Adjusting Element	RV206
Specified Value	1.4 MHz $\pm$ 1 kHz
1.7 MHz Adjustment	
Measurement Point	Pin ④⑦ of IC201
Adjusting Element	RV202
Specified Value	1.8 MHz $\pm$ 1 kHz

Note: Connect the frequency counter through a probe of high input impedance (more than 10 M Ω) and low capacity (10 pF or less)

Adjusting Method:

- 1) Connect the frequency counter to each measurement point.
- 2) Adjust each volume so that each frequency meets its specified value.

3. Deviation Adjustment (HF-27 Board)

The adjustment element of the right channel is indicated in [].

Mode	Playback
Signal	Hi-Fi alignment tape
Measurement Point	AUDIO LINE OUT left [right]
Measurement Equipment	Audio level meter
Adjustment Element	RV207 [RV203]
Specified Value	- 7.5 $\pm$ 0.2 dBs

Adjustment Method:

- 1) Make sure that "STEREO" segment lights on the fluorescent display.
- 2) Adjust left [right] channel audio output level to - 7.5 $\pm$ 0.2 dBs using RV207 [RV203].

4. BPF f_0 Adjustment (HF-27 Board)

Mode	PB
Signal	Carrier Frequency : 1,608 MHz, No modulation Input 200 mVp-p : Pin ⑩ of CN202
Measurement Point	Pin ⑩⑧ of CN202 Pin ④⑥ of IC201
Measuring Instrument	Oscilloscope
Adjusting Element	RV204

Adjusting Method:

- 1) Adjust RV204 so that the level ① goes to the same level as ②.

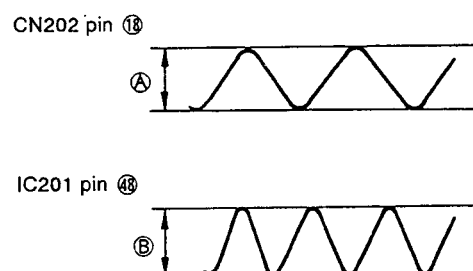


Fig. 7-7.

7-5-2. Normal Audio System Adjustment

- Make adjustment in the SP mode, unless otherwise specified. Use a normal VHS cassette for an adjustment tape.
- Make adjustment with the switches set to the following positions.

INPUT SELECT switch LINE 1

[Adjusting Sequence]

1. ACE head adjustment ... See Mechanism Block Adjustment
2. E-E output level check
3. Recording bias adjustment
4. Overall level characteristic and distortion check

1. ACE Head Adjustment

See "Mechanism Block Adjustment".

2. E-E Output Level Check

Mode	E-E
Signal	L, R : 400 Hz, - 7.5 dBs
Measurement Point	AUDIO LINE OUT L or R
Adjusting Element	Audio level meter
Specified Value	- 7.5 ± 2 dBs

Confirming Method:

- 1) Simultaneously input a signal of 400 Hz, - 7.5 dBs to both L and R channels of Audio Line Input.
- 2) Confirm that the audio output level is - 7.5 ± 2 dBs.

3. Recording Bias Adjustment (MA-144 Board)

Mode	REC and PB
Signal	400 Hz, - 30 dBs 7 kHz, - 30 dBs
Measurement Point	AUDIO LINE OUT L or R
Measuring Instrument	Audio level meter
Adjusting Element	RV851
Specified Value	0 ± 1 dB

Adjusting Method:

- 1) Supply a signal of 400 Hz, - 30 dBs to Audio Line Input.
- 2) Connect the audio level meter to the Audio Line Output.
- 3) Adjust the attenuator so that the audio level meter will indicate - 30 dBs.
- 4) Make recording in the SP mode.
- 5) Set an audio line input signal to 7 kHz and make recording.
- 6) Playback a recorded portion, and measure output levels at 400 Hz and 7 kHz.
- 7) Confirm that the 7 kHz playback output levels within a range of the 400 Hz playback output level 0 ± 1 dB. When beyond this range, adjust RV851 and repeat the steps 1) through 7) above.

4. Overall Level Characteristic and Distortion Factor Check

Mode	REC and PB
Signal	400 Hz, - 7.5 dBs
Measurement Point	AUDIO LINE OUT L or R
Measuring Instrument	Audio level meter and distortion factor gauge
Specified Value	Playback level : - 7.5 ± 2 dBs Distortion factor : 4% or less

Confirming Method:

- 1) Supply an audio signal of 400 Hz, - 7.5 dBs simultaneously to both L and R channels of Audio Line Input.
- 2) Make recording.
- 3) Playback a recorded portion.
- 4) Confirm that a playback level is - 7.5 ± 2 dBs.
- 5) Confirm that a distortion factor is within 4%.

7-6. TUNER SYSTEM ADJUSTMENT

7-6-1. RF AGC Check

1. SLV-E7B(MA-144 Board)

Signal	RF : E-5 CH, $66 \pm 5\text{dB } \mu\text{V}$ (Video: Color Bar) (Audio: Optional)
Mesurement Point	TU801 Pin ④
Measuring Instrument	Digital voltmeter
Specified Value	$6.0 \pm 0.5\text{ V}$

Cheking Method:

- 1) Tune in E-5CH.
- 2) Connect a digital voltmeter to TU801 Pin ④ and confirm the reading on a digital voltmeter gose $6.0 \pm 0.5\text{ V}$.

2. EXCEPT SLV-E7B (TU-136 Board)

Signal	SLV-E7AE/AP/NC/NP/VP RF : E-5 CH, $66 \pm 3\text{dB } \mu\text{V}$ SLV-E7UB/UY/E8UV RF : B-30 CH, $64 \pm 3\text{dB } \mu\text{V}$ (Video: Color Bar) (Audio: Optional)
Mesurement Point	TU001 Pin ⑥
Measuring Instrument	Digital voltmeter
Specified Value	$6.0 \pm 0.5\text{ V}$

Cheking Method:

- 1) Tune in the casnnel above in the table.
- 2) Connect a digital voltmeter to TU001 Pin ⑥ and confirm the reading on a digital voltmeter gose $6.0 \pm 0.5\text{ V}$.

7-6-2. Receive Separation Adjustment (TU-136 Board) (EXECPT SLV-E7UB/UY/E8UV)

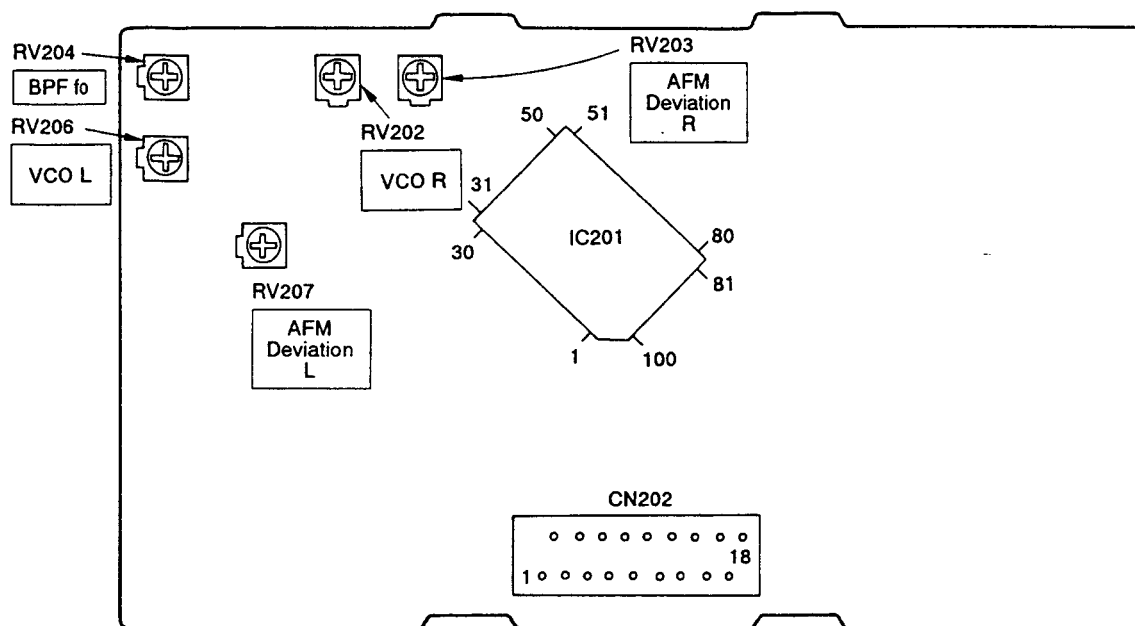
Signal	Stereo Lch: No modulation Rch: 1 kHz Modulation: 100%
Connection Point	AUDIO LINE OUT L
Measuring Instrument	Oscilloscope
Adjusting Element	RV001

Adjusting Method:

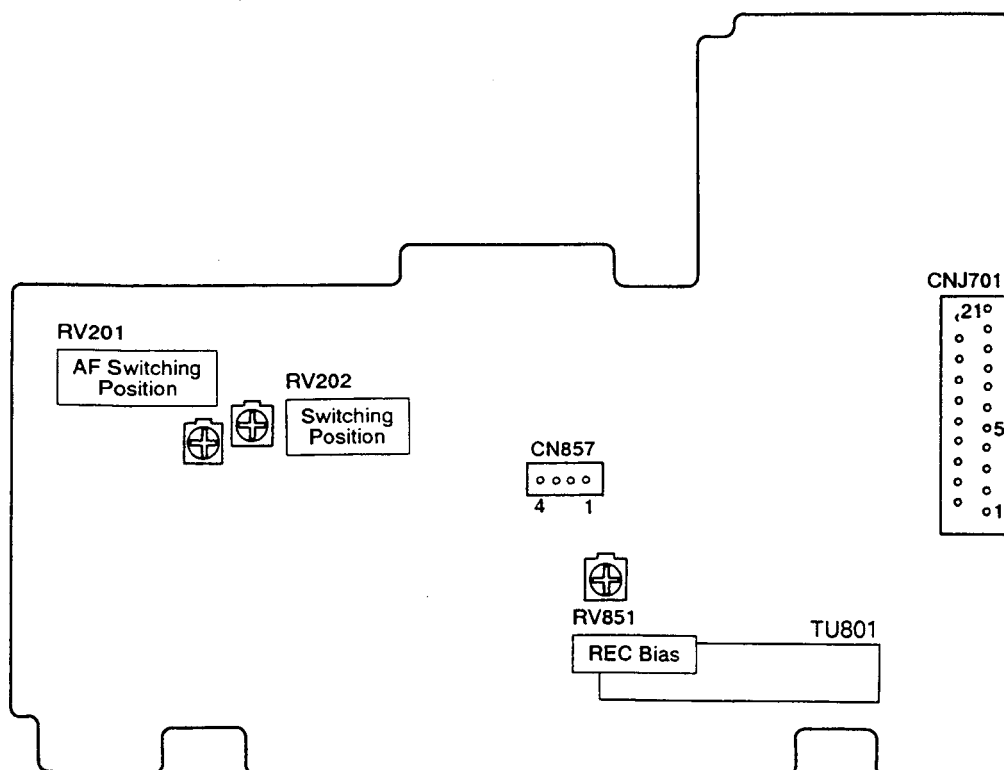
- 1) Set the sound multiplex signal generator in the Stereo mode, and set Lch to 400 Hz and Rch to 1 kHz, 100% modulation.
- 2) Connect the oscilloscope to the Lch of Audio Line Output.
- 3) Adjust RV001 to minimize Rch (1 kHz) output.
When this is done, do not fully turn RV001.
(The "STEREO" indication must be illuminated.)

7-7. PARTS ARRANGEMENT DIAGRAM FOR ADJUSTMENTS

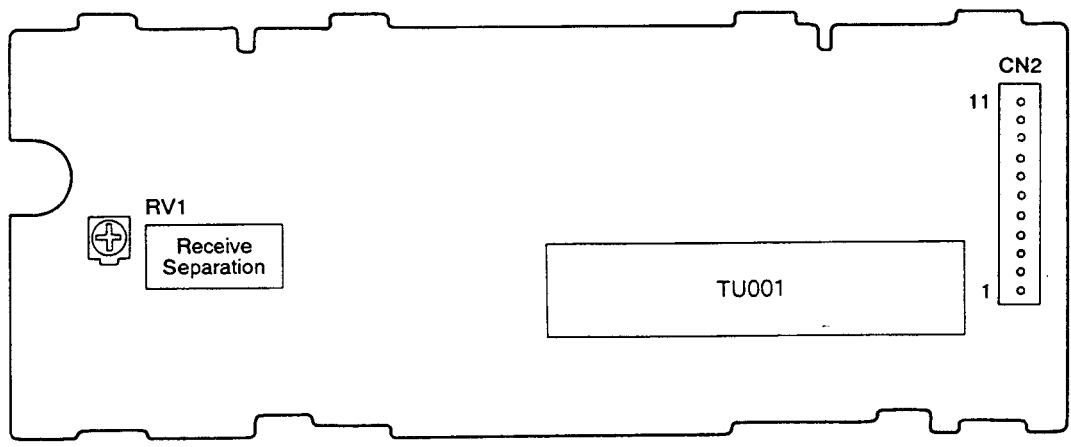
HF-27 BOARD (COMPONENT SIDE)



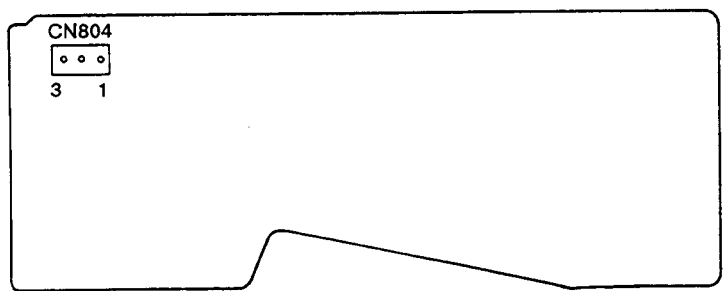
MA-144 BOARD (COMPONENT SIDE)



TU-136 BOARD (COMPONENT SIDE)



RP-163 BOARD (COMPONENT SIDE)



SLV-E7AE/AP/B/NC/NP/UB/VP SLV-ER7UY/SLV-E8UV RMT-AG1/V131/V131B

SONY SERVICE MANUAL

AEP Model

SLV-E7AE

Netherlands Model

SLV-E7AP

French Model

SLV-E7B

North European Model

SLV-E7NC

Spanish Model

SLV-E7NP

Germany Model

SLV-E7VP

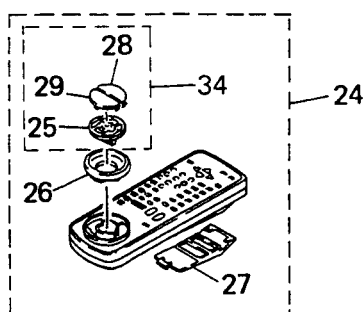
UK Model

SLV-E7UB/IER7UY/IE8UV

CORRECTION-1

Please correct your service manual.

SECTION 5 EXPLODED VIEWS



Page	INCORRECTION			CORRECTION		
	Ref No.	Part No.	Description	Ref No.	Part No.	Description
108	25	3-941-619-11	HOLDER, DIAL	25	not supplied	
	27	3-943-535-01	COVER, BATTERY	27	3-746-029-01	COVER, BATTERY
	28	3-941-617-61	BUTTON, PLAYBACK	28	not supplied	
	29	3-941-618-51	BUTTON, STOP	29	not supplied	
	34	_____	_____	34	X-3942-484-1	BUTTON ASSY (RMT-V131) (EXCEPT E7B) (ENGLISH)
	34	_____	_____	34	X-3942-486-1	BUTTON ASSY (RMT-V131B) (E7B) (FRENCH)

SLV-E7AE/AP/B/NC/NP/UB/VP SLV-ER7UY/SLV-E8UV RMT-AG1/V131/V131B

SONY® SERVICE MANUAL

AEP Model
SLV-E7AE

Netherlands Model
SLV-E7AP

French Model
SLV-E7B

North European Model
SLV-E7NC

Spanish Model
SLV-E7NP

Germany Model
SLV-E7VP

UK Model
SLV-E7UB/ER7UY/E8UV

CORRECTION-2

Please correct your service manual.

 : Corrected portion

Page	Incorrect				Correct			
	Ref. No.	Part No.	Description	Remak	Ref. No.	Part No.	Description	Remak
	<IC>				<IC>			
	IC101	8-759-246-14	IC TA8823N		IC101	8-759-246-14	IC TA8823N	
	IC131	8-759-513-73	IC PQ09RF11		IC131	8-759-513-73	IC PQ09RF11	
	IC132	8-759-983-45	IC PQ12RF11		IC132	8-759-983-45	IC PQ12RF11	
	IC201	8-759-983-45	IC BA6238A		IC201	8-759-983-45	IC BA6238A	
	IC202	8-759-908-17	IC TL082CPS		IC202	8-759-908-17	IC TL082CPS	
119	IC203	8-752-836-58	IC CXP80724-061Q		IC203	8-752-844-32	IC CXP80724-069Q 	
	IC204	8-759-970-89	IC BA10358F		IC204	8-759-970-89	IC BA10358F	
	IC301	8-759-089-79	IC MB90085PF-129		IC301	8-759-089-79	IC MB90085PF-129	
	IC302	8-759-164-09	IC LA7218M-DE-R		IC302	8-759-164-09	IC LA7218M-DE-R	
	IC501	1-809-952-11	IC MODUL, CANAL PLUS BX8179 (E7:B, NP)		IC501	1-809-952-11	IC MODUL, CANAL PLUS BX8179 (E7:B, NP)	
	IC601	1-809-957-11	IC H8B7220B		IC601	1-809-957-11	IC H8B7220B	
	IC602	1-809-959-11	IC TME656 (E7:B)		IC602	1-809-959-11	IC TME656 (E7:B)	
	IC603	1-809-958-11	IC BX8189 (E7:VP)		IC603	1-809-958-11	IC BX8189 (E7:VP)	
	IC605	8-759-511-44	IC LVA522SA		IC605	8-759-511-44	IC LVA522SA	